Annual Groundwater Monitoring Report
Per EPA CCR Rule (CFR § 257.90 – 257.98)

2025 Annual Report

Asbury Power Plant CCR Impoundment
Jasper County, MO

January 2026

Prepared For:
The Empire District Electric Company
602 S. Joplin Avenue
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CERTIFICATE OF COMPLIANCE

Annual Groundwater Monitoring Report for Existing CCR Surface Impoundments
EPA CCR Rule Section 40 CFR 257.90(e)
The Empire District Electric Company – Asbury Power Plant
Asbury, Missouri

The following presents the Annual Groundwater Monitoring Report for The Empire District Electric Company's CCR Impoundment at the Asbury Power Plant. This serves as certification that the facility is in compliance with 40 CFR 257.90(e) of the EPA CCR Rule.

40 CFR 257.90(e) states:
(e) Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report.

CERTIFICATION 257.90(e)
The undersigned Professional Engineer (P.E.) is familiar with the requirements of 40 CFR Part 257. The above summarizes the status of the Groundwater Monitoring for The Empire District Electric Company's CCR Impoundment at the Asbury Power Plant. I hereby certify that the facility is in compliance with 40 CFR 257.90(e) and all information has been placed in the Operating Record. Notification of availability of this document should be provided to the State Director as required in section 257.107(h).

Name: Lindsey R. Henry, PE

Signature:

Date: 1/30/2026

Registration Number: E-21592

State: Missouri

Seal:

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1.0 INTRODUCTION

The EPA Coal Combustion Residual Regulations (40 CFR Part 257) (CCR Rule) require groundwater monitoring of CCR impoundments. This Asbury Power Plant CCR impoundment groundwater monitoring sampling report is in accordance with the EPA CCR Rule.

In accordance with the EPA CCR Rule (§ 257.90 - 257.98) the status of the Groundwater Monitoring was placed online October 17, 2017, as required by the EPA CCR rule. Background data of Appendix III and Appendix IV was collected from January 2016 to August 2017. After review of the first semi-annual groundwater sampling event analytical results completed in October 2017, the constituents listed in Appendix IV were eliminated from the overall semi-annual detection monitoring plan in accordance with the EPA CCR Rule.

The Asbury Power Plant was retired on March 1, 2020. Residual fly ash, bottom ash, and other related wastes were placed in the impoundment area until April 1, 2021, as part of the decommissioning activities. On April 1, 2021, a Notification of Intent to Close CCR Surface Impoundment was posted to the facility's website and the State Director (MDNR) was notified. Dewatering of the impoundment was occurring during the first part of 2022. CCR grading, excavation and relocation activities began in June of 2022. Construction Closure of the final cap of the CCR impoundment was completed on January 23, 2023.

On May 13 & 14, 2025 and November 5 & 16, 2025 semi-annual detection monitoring sampling events was conducted per the EPA CCR Rule (§ 257.94). Nine (9) groundwater-monitoring wells were sampled and analyzed for the EPA Appendix III. In addition, MW-5AR which began sampling in May 2023 was also analyzed for EPA Appendix IV parameters. MW-5AR was installed in April 2023 in response to the Alternative Source Demonstration (ASD) which was completed in April 2021. The ASD was placed in the operating record. The ASD found the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality instead of a release to groundwater.

The ASD theorized that this SSI was an issue with the location of the well rather than from a release from the facility. This alternative source demonstration confirmed that MW-5A may be impacted by its placement upgradient of a historic dewatering trench and cutoff trench. The ASD proposed a replacement well for MW-5A be installed downgradient of the dewatering trench and cutoff trench system. The replacement well MW-5AR was installed prior to the May 2023 sampling event and the initial sampling results were compared to the existing MW-5A. Review of initial sampling results indicate that the theory may be correct. Monitoring of both MW-5A and MW-5AR will continue until the eight needed baseline samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease. Based on the results of the 2025 statistical analysis, the site will continue with detection monitoring for the 2026 sampling events per the EPA CCR Rule (§ 257.94).

The EPA CCR Rule requires the annual groundwater report to be completed by January 31st of the following year. This report serves as the annual groundwater report for the 2025 sampling events that will be completed by January 31, 2026 and posted on-line within 30 days. This report was prepared in general accordance with the EPA CCR Rule for groundwater requirements. These regulations outline groundwater monitoring requirements and data evaluation methods. The Empire District will notify the MDNR "State Director" via e-mail when this document is posted on-line, as required in the CCR rule.

2.0 BACKGROUND DATA

The purpose of the groundwater monitoring plan is to monitor the groundwater quality surrounding the facility and to evaluate potential impacts and/or releases from facility operations. The groundwater monitoring system for the site consists of the following monitoring wells:

- MW-1 Sidegradient (water level only)
- MW-2 Upgradient
- MW-3 Upgradient
- MW-4 Downgradient
- MW-5 Downgradient
- MW-5A Downgradient
- MW-5AR Downgradient (background sampling)
- MW-6 Downgradient
- MW-6A Downgradient
- MW-7 Sidegradient

Background groundwater data was collected from January 2016 to August 2017. After the background data plus the first semi-annual sampling events, a reduced sampling frequency replaced the quarterly events to semi-annual events. This lessened sampling frequency will be completed during the months of April/May/June and October/November/December. Statistical analysis for EPA Appendix III began after the first semi-annual sampling event was collected on October 4, 2017. MW-5AR baseline monitoring started in May 2023 and will be completed semi-annually until eight (8) rounds of background sampling data are obtained.

3.0 MAY 2025 SAMPLING EVENT

On May 13 & 14, 2025, a semi-annual sampling event was conducted per the EPA CCR Rule (§ 257.90-.98). The original nine (9) groundwater-monitoring wells were sampled and analyzed for the EPA Appendix III. In addition, MW-5AR was also sampled for Appendix III and Appendix IV parameters. For quality assurance and quality control measures, a duplicate sample at MW-5 was taken.

Table 1 – Constituents During May 2025 Sampling Event

Constituent	Units	MCL	MW-2 (up)	MW-3 (up)	MW-4 (down)	MW-5 (down)	MW-5A (down)	MW-5AR (down)	MW-6 (down)	MW-6A (down)	MW-7 (side)
Appendix III											
Boron	ug/L	NE	<100	<100	100	270	1900	400	370	<1000	230
Calcium	mg/L	NE	24000	99000	110000	84000	430000	140000	250000	210000	450000
Chloride	mg/L	NE	120	56	49	4.6	170	5.5	38	88	40
Fluoride	mg/L	4.0	0.17	0.11	0.18	0.31	0.37	0.30	0.40	0.27	0.31
pH	SU	NE	5.67	5.83	6.47	7.28	6.77	7.20	7.06	6.65	6.30
Sulfate	mg/L	NE	100	500	300	140	1900	410	1100	1300	1800
Total Dissolved Solids	mg/L	NE	380	850	820	590	3200	980	7700	2100	2700

NE = Not Established
<x = Less than reporting limit (nondetectable)

Boron (MW-5A), pH (MW-5 and MW-6), and total dissolved solids (MW-5A) exhibited confirmed SSIs during the May 2025 event. Total dissolved solids (MW-6) exhibited an initial SSI during the May 2025 event. Of the SSIs, none have an established MCL.

EPA CCR Rule 40 CFR § 257.94(e)(2) allows an Alternative Source Demonstration (ASD) that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality for a constituent found in a monitoring well. This ASD was completed in April 2021 and placed in the operating record. The ASD found the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality instead of a release to groundwater.

The ASD theorized that this SSI was an issue with the location of the well rather than from a release from the facility. This alternative source demonstration confirmed that MW-5A may be impacted by its placement upgradient of a historic dewatering trench and cutoff trench. The ASD proposed a replacement well for MW-5A be installed downgradient of the dewatering trench and cutoff trench system. The new replacement well MW-5AR was installed prior to the May 2023 sampling event and the initial sampling results were compared to the existing MW-5A. Review of initial sampling results indicate that the theory may be correct. Monitoring of both MW-5A and MW-5AR will continue until the eight needed background samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease.

4.0 NOVEMBER 2025 SAMPLING EVENT

On November 5 & 6, 2025, a semi-annual detection monitoring sampling event was conducted per the EPA CCR Rule (§ 257.94). The original nine (9) groundwater-monitoring wells were sampled and analyzed for the EPA Appendix III. In addition, MW-5AR was also sampled for Appendix III and Appendix IV parameters. For quality assurance and quality control measures, a duplicate sample at MW-5 was taken.

Table 2 – Constituents During November 2025 Sampling Event

Constituent	Units	MCL	MW-2 (up)	MW-3 (up)	MW-4 (down)	MW-5 (down)	MW-5A (down)	MW-5AR (down)	MW-6 (down)	MW-6A (down)	MW-7 (side)
Appendix III											
Boron	ug/L	NE	100	<100	100	320	2500	420	450	<700	<400
Calcium	mg/L	NE	35000	100000	85000	91000	480000	110000	290000	240000	500000
Chloride	mg/L	NE	100	49	29	5.8	160	6.2	34	70	37
Fluoride	mg/L	4.0	0.19	0.11	0.21	0.28	0.27	0.23	0.25	0.17	0.19
pH	SU	NE	6.15	5.78	6.61	7.23	6.61	7.46	6.92	6.38	6.28
Sulfate	mg/L	NE	120	520	250	150	2000	410	1100	1200	1800
Total Dissolved Solids	mg/L	NE	430	910	520	580	3300	900	2000	2000	2800

NE = Not Established

<x = Less than reporting limit (nondetectable)

J = Trace value seen above minimum detection limit but below reporting limit (trace)

The November 2025 sampling results confirmed an interwell prediction exceedance for boron (MW-5A) and total dissolved solids (MW-5A). There are no current primary (health based) MCLs for boron or total dissolved solids. The facility will resample as part of the May 2026 sampling event.

There was a confirmed interwell prediction limit exceedance for pH in MW-5. This well will be resampled in May 2026.

The results of the interwell prediction limit statistical analysis of the November 2020 to November 2025 sampling events indicate a confirmed exceedance for Boron (MW-5A). EPA CCR Rule 40 CFR § 257.94(e)(2) allows an Alternative Source Demonstration (ASD) that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality for a constituent found in a monitoring well. This ASD was completed in April 2021 and placed in the operating record. The ASD found the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality instead of a release to groundwater.

The ASD theorized that this SSI was an issue with the location of the well rather than from a release from the facility. This alternative source demonstration confirmed that MW-5A may be impacted by its placement upgradient of a historic dewatering trench and cutoff trench. The ASD proposed a replacement well for MW-5A be installed downgradient of the dewatering trench and cutoff trench system. The new replacement well MW-5AR was installed prior to the May 2023 sampling event and the initial sampling results were compared to the existing MW-5A. Review of initial sampling results indicate that the theory may be correct. Monitoring of both MW-5A and

MW-5AR will continue until the eight needed background samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease.

Based upon these findings the site will not need to move into the assessment monitoring program at this time and will continue with the detection monitoring program per the EPA CCR Rule (§ 257.94) on a semi-annual basis.

5.0 EXCUTIVE SUMMARY

This report is a summary of the 2025 sampling events and the findings of the statistical analysis of the results of the groundwater detection monitoring program at the Asbury Power Plant CCR Impoundment. Specific information about each sampling event can be obtained from the individual reports which are included as appendices and have been placed in the Asbury Operating Record. Statistical analysis will continue utilizing interwell prediction limits per EPA's request. The site continues with the detection monitoring program on a semi-annual basis per the EPA CCR Rule (§ 257.94).

APPENDIX A

May 2025 Sampling Event

Groundwater Monitoring, Sampling & Statistics Per EPA CCR Rule (CFR § 257.90-257.98)

May 2025 Sampling Event

Asbury Power Plant CCR Impoundment
Jasper County, MO

August 2025

Prepared For:
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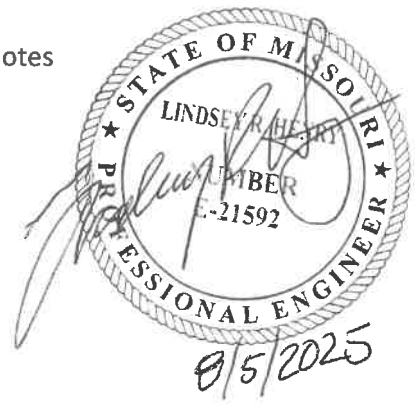


1.0 INTRODUCTION

The EPA Coal Combustion Residual Regulations (40 CFR Part 257) (CCR Rule) require groundwater monitoring of CCR impoundments. This Asbury Power Plant CCR impoundment groundwater monitoring sampling report is in accordance with the EPA CCR Rule. In accordance with the EPA CCR Rule (§ 257.90-.98) the status of the Groundwater Monitoring was placed on-line October 17, 2017, as required by the EPA CCR rule. Empire notified the Missouri Department of Natural Resources (MDNR) "State Director" via e-mail when this document was posted on-line, as required in the CCR rule.

The EPA CCR Rule requires the annual groundwater report to be prepared by January 31st of the following year. The first report was due January 31, 2018. This report was prepared in general accordance with the EPA CCR Rule for groundwater requirements. These regulations outline groundwater monitoring requirements and data evaluation methods. The annual groundwater report for the 2024 sampling events will be posted on-line within 30 days of placement in the operating record and the State Director will be notified.

A Site Characterization Workplan was submitted to the MDNR. On November 2, 2017, the facility received approval from MDNR that the site had been properly characterized and the facility could begin groundwater monitoring (included in **Appendix 1**).

The purpose of the groundwater monitoring system is to monitor the ground water quality surrounding the facility and to evaluate potential impacts and/or releases from facility operations. Eight rounds of background groundwater data were collected from January 2016 to August 2017. After the background data is obtained and after the first semi-annual sampling event, a reduced sampling frequency replaced the quarterly events to semi-annual events. This reduced sampling frequency will generally be completed during the months of May and November. Statistical analysis for EPA Appendix III results began after the first semi-annual sampling event which was collected on October 4, 2017. This analysis was to determine if a statistically significant increase (SSI) has occurred. If an SSI is verified, additional evaluation is required to determine if the SSI was caused by the CCR impoundment.

The Asbury Power Plant was retired on March 1, 2020. Residual fly ash, bottom ash, and other related wastes were placed in the impoundment area until April 1, 2021, as part of the decommissioning activities. On April 1, 2021, a Notification of Intent to Close CCR Surface Impoundment was posted to the facility's website and the State Director (MDNR) was notified. Dewatering of the impoundment was occurring during the first part of 2022. CCR grading, excavation and relocation activities began in June of 2022. Closure of the CCR impoundment was completed on January 23, 2023.

On May 13 and 14, 2025, a semi-annual sampling event was conducted per the EPA CCR Rule (§ 7.90-.98). The original nine (9) groundwater-monitoring wells were sampled and analyzed for the EPA Appendix III. In addition, MW-5AR sampling began in May 2023. MW-5AR was installed in April 2023 in response to the Alternative Source Demonstration (ASD) which was completed in April 2021. The ASD was placed in the operating record. After review of the first semi-annual groundwater sampling event analytical results completed in October 2017, the constituents listed in Appendix IV were eliminated from the overall semi-annual detection monitoring plan in accordance with the EPA CCR Rule. For quality assurance and quality control measures, a

duplicate sample at MW-5 was taken. These samples were preserved and submitted directly to the laboratory.

This report is a summary of the May 2025 sampling event and the findings of the statistical analysis of the results of the groundwater monitoring program at the Asbury Power Plant CCR Impoundment. Specific information about each sampling event can be obtained from the individual report which is part of the Asbury Operating Record.

2.0 SITE LOCATION

The site occupies the north half of Section 17, Township 30 North, and Range 33 West on the Asbury 7.5-Minute Quadrangle Map as seen in **Figure 1**. The site is located approximately 5.5 miles north-northeast of Asbury, Missouri, about 14 miles north-northwest of Joplin, Missouri. A map showing the locations of the monitoring wells is in **Figure 2**.

2.1 History

In March 1996, five (5) groundwater monitoring wells, MW-1 through MW-5, were installed around the perimeter of the Asbury Power Plant CCR impoundment. Monitoring wells MW-1, MW-2 and MW-3 were installed to a total depth of between 27.0 to 28.5 feet below ground surface (bgs). Monitoring wells MW-4 and MW-5 were installed to a total depth of 48 feet bgs. Each of the five monitoring wells was equipped with 10.0-foot well screens. The five wells were then developed, purged, and sampled in 1996.

In 2003, two (2) additional groundwater monitoring wells were installed and identified as MW-6 and MW-7. Both wells had 2-inch diameter PVC well casings installed to an approximate total depth of 44 feet below ground surface. Both wells were installed with an above ground steel protective cover. No other construction details such as well screen lengths were available for these two (2) wells. In December 2015, two (2) additional groundwater monitoring wells were installed and identified as MW-5A and MW-6A.

In April 2023, monitoring well MW-5AR was installed as proposed in the Alternative Source Demonstration completed April 2021. As part of this well installation maintenance of the entire groundwater monitoring well system was also completed. This included the installation of new concrete well pads, protective covers, and protective bollards. The well riser pipe was also modified for well cap installation. New as-built survey data was obtained and will be utilized in this and future reports. MW-5A will not be removed until after the eight (8) background samples have been collected for MW-5AR.

All wells are registered with MDNR – Missouri Geological Survey Program.

The Asbury Power Plant was retired on March 1, 2020, but residual fly ash, bottom ash, and other related wastes were placed in the impoundment area as part of the decommissioning activities. The facility is now known as the Asbury Renewable Operations Center. On April 1, 2021, a Notification of Intent to Close CCR Surface Impoundment was posted to the facility's website and the State Director (MDNR) was notified. Dewatering of the impoundment was occurring during the first part of 2022. CCR grading, excavation and relocation activities began in June of 2022. Closure of the CCR impoundment was completed on January 23, 2023.

2.2 Site Geology

Drilling and subsurface investigation activities at the Site and as part of the MDNR approved CCR landfill Detailed Site Investigation (DSI) for the adjacent landfill area identified three (3) primary geologic units at the Site. These geologic units include the surficial soil layer, Warner Sandstone (uppermost aquifer), and Riverton Shale (confining unit). The information presented herein includes the primary elements of a site characterization work plan consistent with the MDNR guidance.

Surficial Soil. Soils at the site consist of a surficial unit of cohesive soils (e.g., CL, SC, ML, and CH) underlain by Pennsylvanian-age bedrock. Soil thickness at the Site ranges from approximately 15-25 feet.

Warner Sandstone. The Warner Sandstone (Sandstone) is the uppermost bedrock unit in the south portion of the Site. In the north area of the Site, the Sandstone is overlain by the Riverton Shale (Shale). Based on the DSI information, the Sandstone and Shale can occur as alternating layers. The Sandstone and Shale are gradational in places and transition from shaley sandstone to sandy shale. According to the MDNR publication on the Pennsylvanian Subsystem in Missouri, the Warner Sandstone formation is described as follows: "Generally, the lower part is interbedded, very fine-grained sandstone and claystone. The upper part is largely medium bedded to massive channel fill sandstone. In places, the Warner consists primarily of shale and claystone, with only minor amounts of sandstone" and "ranges in thickness from 0 to 15m (49.2 ft.)."

The Sandstone is more than 25-30 feet thick in places and is generally medium hard and thin to medium bedded with occasional shale partings. The degree of induration of the Sandstone varies and generally increases with depth. Slug tests performed at selected DSI piezometers screened in the Sandstone exhibited hydraulic conductivities ranging from approximately 1.3x10-4 cm/sec to 5.9x10-6 cm/sec. The slug test results are consistent with values for sandstone and shaley sandstone. The groundwater gradient is towards the east and Blackberry Creek.

Riverton Shale. Layers of the Riverton Shale (Shale) exhibited thicknesses ranging from approximately one foot to more than 10 feet. The Shale is generally dark gray to light gray. The Shale is mainly thin bedded with hardness ranging from soft to hard. Six packer tests were performed during the DSI to assess the hydraulic conductivity of the Shale. The packer test results ranged from approximately $3.2x10^{-6}$ cm/sec to $4.9x10^{-8}$ cm/sec. The packer test data indicates that the Shale is an effective confining unit.

According to the MDNR publication on the Pennsylvanian Subsystem in Missouri, the Riverton Shale formation is described as "dark gray to black, fine-grained, relatively brittle shale and contains as many as three coal beds, each of which is underlain by underclay" and "varies in thickness from a featheredge to more than 90 feet".

Unnamed Coal. The Shale includes coal seams in places that range in thickness from a few inches to approximately 1.5 feet. The coal is generally black to dark gray.

2.3 Groundwater Monitoring Network Design

The groundwater monitoring system for the CCR impoundment consists of nine (9) groundwater monitoring wells including the recently installed MW-5AR. Two (2) wells are considered upgradient. Two (2) wells are considered sidegradient; one well is only monitored for groundwater elevation. The remaining five (5) wells are considered downgradient along with the recently installed MW-5AR.

The groundwater monitoring wells (MWs) at the Asbury Power Plant are equipped with individual dedicated poly tubing to be connected to a peristaltic pump/controller at the surface. Low-flow, micro-purge and sampling techniques and technology are utilized to collect groundwater samples from the subject wells. The groundwater sampling procedures are discussed in further detail below.

2.4 Groundwater Monitoring Network

The locations of the monitoring wells are shown in **Figure 2**. The groundwater monitoring system for the site consists of the following monitoring wells:

- MW-1 Sidegradient (water level only)
- MW-2 Upgradient
- MW-3 Upgradient
- MW-4 Downgradient
- MW-5 Downgradient
- MW-5A Downgradient
- MW-5AR Downgradient (background sampling)
- MW-6 Downgradient
- MW-6A Downgradient
- MW-7 Sidegradient

2.5 Seasonal Variation

Historical groundwater elevation data has been limited. However, adequate lengths of well screen have been utilized during the construction of the wells to accommodate typical seasonal groundwater elevation variations seen in southwest Missouri.

2.6 Groundwater Flow Direction

Historically, the seasonally high potentiometric surface indicated the groundwater flow direction to the east. **Figure 3** is a potentiometric map for this sampling event.

Originally MW-7 was thought to be a downgradient well but review of the potentiometric mapping from the eight background sampling events revealed that the well is a sidegradient well. Therefore, the designation for MW-7 has been changed from a downgradient to a sidegradient well for compliance monitoring.

3.0 BACKGROUND GROUNDWATER DATA

In accordance with EPA CCR Rule § 257.94(b), the site initiated the detection monitoring program in January 2016 to include obtaining a minimum of eight (8) independent samples for each background and downgradient well. The eight (8) independent groundwater samples were obtained and analyzed as required by the CCR Rule per the groundwater monitoring plan. Background groundwater data was collected from January 2016 to August 2017.

Groundwater Monitoring Reports were completed for each sampling event and have been placed in the Operating Record. A listing of each background groundwater sampling event is below:

- January 2016
- March 2016
- May 2016
- August 2016
- October 2016
- March 2017
- June 2017
- August 2017

Initial background monitoring was required at all monitoring wells. The sampling frequency was quarterly or more frequently for the first two (2) years. After the background data plus the first semi-annual sampling events, a reduced lower sampling frequency replaced the quarterly events to semi-annual events. This lessened sampling frequency will be completed during the months of April/May/June and October/November/December. MW-5AR background monitoring started in May 2023 and will be completed semi-annually until eight (8) rounds of background sampling data are obtained.

The initial two (2) years of background and the first semi-annual detection monitoring included parameters listed in Appendix III and Appendix IV of the EPA CCR Rule. The constituents listed in Appendix IV were eliminated from the overall semi-annual detection monitoring plan after review of the first semi-annual groundwater sampling event analytical results in January 2018, according to the EPA CCR Rule.

4.0 GROUNDWATER SAMPLING EVENT

On May 13 and 14, 2025, nine (9) groundwater monitoring wells were sampled by Midwest Environmental Consultants (MEC) for the EPA CCR Rule Appendix III parameters. In addition, MW-5AR was also sampled for Appendix III and Appendix IV parameters. For quality assurance and quality control measures, a duplicate sample was taken at MW-5. The sampling protocol and methodology was to be conducted in accordance with the facility's Sampling and Analysis Plan. **Table 1** provides a list of the analytical methods employed by the subcontracted laboratory.

Table 1 – Analytical Methods	
Method	**Description**
9056A	Anions, Ion Chromatography
6020A	Metals (ICP/MS)
SM 2540C	Solids, Total Dissolved (TDS)
Field Sampling	Field Sampling

Appendix 2 includes Monitoring Well Field Inspection sheets and field notes. The physical integrity of the wells was good. During sample collection each of the wells was monitored for pump discharge and formation recharge. Initially, a static water level for each well was recorded (**Table 2**). To ensure sufficient recharge while sampling, static water levels were collected during pumping. Prior to sample collection, field parameters for each well were measured with a flow-through meter. When the field parameters stabilized, samples for analytical testing were collected and placed on ice for express over-night delivery via FedEx to the laboratory. At the conclusion of sample collection from each well, a final static water level measurement was obtained. The samples were collected in the appropriately pre-preserved sample containers and placed on ice for delivery.

Table 2 - Groundwater Sampling Field Parameters Summary During May 2025 Sampling Event				
WELL ID	**STATIC WATER LEVEL (ft-BTOC)**		**PURGE RATE (mL/min)**	**STABILIZED pH**
	Initial	**Final**		
MW-1*	7.32	NA	NA	NA
MW-2	3.83	6.28	200	5.67
MW-3	1.57	1.62	200	5.83
MW-4	7.96	12.97	200	6.47
MW-5	2.51	11.22	200	7.28
MW-5A	10.30	17.58	200	6.77
MW-5AR	3.40	11.98	200	7.00
MW-6	9.18	17.41	200	7.06
MW-6A	8.28	16.58	200	6.65
MW-7	4.04	4.17	200	6.30

* Water Level Only NA – Not Applicable

Appendix 3 includes the analytical results for the sampling event. Included with this analytical report are sample information; chain of custody; wet chemistry data; and volatile data.

5.0 DATA VALIDATION PROCEDURES FOR GROUNDWATER MONITORING DATA

Midwest Environmental Consultants receives Data Packages from the analytical laboratory (Eurofins). The internal quality control/quality assurance case narratives and reported data are then reviewed. Generally, the data validation procedures established by the U.S. Environmental Protection Agency *Contract Laboratory Program Functional Guidelines for Organic Data Review* and *Functional Guidelines for Inorganic Data Review* is followed. These guidelines are used to assign data qualifiers to the data. A formal data validation report for the site is not prepared; however, any significant issues are noted in the groundwater monitoring report.

MEC evaluates the data set for precision, accuracy, representativeness, comparability, and completeness (PARCC).

5.1 Precision

Laboratory Precision. Laboratory quality control procedures to measure precision consist of laboratory control sample (LCS) analysis and analysis of matrix spike/matrix spike duplicates (MS/MSD). These analyses are used to define analytical variability.

Field Precision. Analyses of duplicate samples are used to define the total variability (replicability) of the sampling/analytical system. Field replicates are collected at a rate of one per sampling event.

5.2 Accuracy

Accuracy is determined by calculating the percent recoveries for analyses of surrogate compounds, LCSs, continuing calibration check standards, and matrix spike samples. Acceptable percent recoveries are established for SW-846 and EPA methods. Field and laboratory blank analysis are also used to address measurement bias.

Field Blanks. Field blanks consisted of a trip blank and a field blank. At least one trip blank per cooler shipment accompanies samples for volatile organic analyses.

Laboratory Blanks. Method blanks, artificial, matrix-less samples, are analyzed to monitor the laboratory analysis system for interferences and contamination from glassware, reagents, etc. Method blanks are taken through the entire sample preparation process. They are included with each batch of extractions or digestion prepared, or with each 20 samples, whichever is more frequent.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely reflects site condition. Representativeness of the data is determined by comparing actual sampling procedures to those delineated in the field sampling plan, comparing results from field replicate samples, and reviewing the results of field blanks. Field notes are reviewed as part of our data validation process.

5.4 Comparability

Comparability expresses the confidence with which one data set can be compared to another data set measuring the same property. Comparability is ensured by using established and approved sample collection techniques and analytical methods, consistent basis of analysis, consistent reporting units, and analyzing standard reference materials.

5.5 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected under controlled laboratory conditions. Completeness is defined as the valid data percentage of the total tests requested. Valid data are defined as those where the sample arrived at the laboratory intact, properly preserved, in sufficient quantity to perform the requested analyses, and accompanied by a completed chain-of-custody form. Furthermore, the sample must have been analyzed within the specified holding time and in such a manner that analytical QC acceptance criteria were met.

6.0 GROUNDWATER ANALYSIS

Groundwater samples were submitted via over-night express (FedEx) to Eurofins Environmental Testing for analysis.

6.1 Sampling Results

The constituents with results above the laboratory reporting limits are included in **Table 3**. The Eurofins laboratory analytical results are included in **Appendix 3**.

Table 3 – Constituents During May 2025 Sampling Event

Constituent	Units	MCL	MW-2 (up)	MW-3 (up)	MW-4 (down)	MW-5 (down)	MW-5A (down)	MW-5AR (down)	MW-6 (down)	MW-6A (down)	MW-7 (side)
Appendix III											
Boron	ug/L	NE	<100	<100	100	270	1900	400	370	<1000	230
Calcium	mg/L	NE	24000	99000	110000	84000	430000	140000	250000	210000	450000
Chloride	mg/L	NE	120	56	49	4.6	170	5.5	38	88	40
Fluoride	mg/L	4.0	0.17	0.11	0.18	0.31	0.37	0.30	0.40	0.27	0.31
pH	SU	NE	5.67	5.83	6.47	7.28	6.77	7.20	7.06	6.65	6.30
Sulfate	mg/L	NE	100	500	300	140	1900	410	1100	1300	1800
Total Dissolved Solids	mg/L	NE	380	850	820	590	3200	980	7700	2100	2700

NE = Not Established

<x = Less than reporting limit (nondetectable)

J = Trace value seen above minimum detection limit but below reporting limit (trace)

No Constituents were detected above the Federal Safe Drinking Water maximum contaminant level (MCL) during the sampling event.

6.2 Statistical Analysis Approach

Prediction interval analyses compare one or more observations to a limit set by background data. Interwell analyses compare observations from background wells, which include upgradient and sidegradient wells per EPA Unified Guidance definitions, and their relation to the observations for the downgradient wells. Due to varying geology in the state of Missouri, intrawell analyses had initially been deemed a more appropriate statistical method.

On January 21, 2020 MDNR forwarded an email from the USEPA that requested the site change the statistical evaluation methodology to interwell prediction limits. This correspondence is in **Appendix 1.** The EPA review of the groundwater reports is summarized in **Table 4.**

Table 4 – EPA Review of Groundwater Reports	
Facility	Asbury Power Plant
Location	Asbury, MO
Owner	Empire District Electric Company
Units	Upper Pond-unlined, South Pond-unlined, Lower Pond-unlined
Geology	Surficial unit of clay, clayey sand, and silt approximately 15 to 25 feet thick underlain by Warner Sandstone approximately 25-30 feet thick in the southern portion of the site and the Riverton Shale in the northern area of the site
Problematic Use of Intra Well Comparisons	Analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells. Consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra well analysis
Problematic Alternate Source Determination	
Conclusions	While there are no boring logs in the documents to confirm that the wells are screened in the same geologic unit, consistency in the field parameters and the description of the geology suggest that the wells are screened in the sandstone. The analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells, consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra wells analyses

6.3 Statistical Analysis Results

Statistical analysis was completed by Jett Environmental Consultant. The results are included in **Appendix 4.**

Inorganics – Times Series & Trend Testing

Time Series graphs were generated for each of the inorganic constituents. The time series graphs are included in **Appendix 4 - Attachment 1**.

The inorganic constituents with results above the laboratory reporting limits were analyzed with Sanitas™ to determine if statistically significant increasing or decreasing trends exist within the background data range (January 2016 through May 2023) utilizing the Sen's Slope / Mann-Kendall trend test. Trends were based on a 98% confidence level (two tailed). The following constituents exhibited statistically significant increasing trends: boron (MW-5A), calcium (MW- 5A, MW-6A), chloride (MW-5, MW-5A, MW-6), sulfate (MW-5A, MW-6A), and total dissolved solids (MW-5A, MW-6A). Of the increasing trends, no instances were for an upgradient well. All other constituents were either not trending or had a statistically significant decreasing trend. The trending data have only been reviewed at this time. No trending data was removed before performing the inter-well prediction interval analysis. The trend testing results are included in **Appendix 4 - Attachment 2**.

Inorganics – Inter-Well Prediction Limits

Statistical Analysis was performed on the inorganic constituents and metals. Prediction interval analyses compare one or more observations to a limit set by background data. Background data

consists of semi-annual groundwater tests from the upgradient wells (MW-2, MW-3, and MW-7) between January 2016 and May 2023 (20 events). Interwell analyses compare observations from upgradient background wells and their relation to the observations for the downgradient wells. Intra-well analyses compare background observations to current observations of the same well.

Sanitas™ was used to perform the statistical analyses. For most constituents, non-parametric inter-well prediction intervals were performed due to non-detectable levels in more than 50 percent of the background samples or if data were not normally distributed. The Sanitas™ inter-well prediction limit outputs are included in **Appendix 4 - Attachment 3**.

Table 5 lists the parameters that exhibited a statistically significant increase (SSI) during the May 2025 sampling event, the associated monitoring wells, inter-well prediction limit, and the measured concentration. Also included on the table is a comparison to any established USEPA National Primary Drinking Water Standard – Maximum Contaminant Level (MCL).

Table 5
SSI Observed During May 2025 Sampling Event

Constituent (units)	Well	Initial vs. Confirmed	Statistical Limit	Result	MCL
Boron (mg/L)	MW-5A	Confirmed	0.9	1.9	NE
pH (SU)	MW-5	Confirmed	5.22-6.98	7.28	NE
pH (SU)	MW-6	Initial	5.22-6.98	7.06	NE
Total Dissolved Solids (mg/L)	MW-5A	Confirmed	3100	3200	NE
Total Dissolved Solids (mg/L)	MW-6	Initial	3100	7700	NE

NE = Not Established.
MCL = Maximum Contaminant Level

Statistical Power Curves
A statistical power curve graph has been prepared to allow comparisons between the current monitoring program and USEPA-recommended standards. Under the USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (March 2009), inter-well prediction limits are constructed to have a site-wide false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. **Appendix 4 - Attachment 4** presents the power curves for the facility's monitoring program.

Results Summary
Boron (MW-5A), pH (MW-5 and MW-6), and total dissolved solids (MW-5A) exhibited confirmed SSIs during the May 2025 event. Total dissolved solids (MW-6) exhibited an initial SSI during the May 2025 event. Of the SSIs, none have an established MCL.

EPA CCR Rule 40 CFR § 257.94(e)(2) allows an Alternative Source Demonstration (ASD) that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality for a constituent found in a monitoring well. This ASD was completed in April 2021 and placed in the operating record. The ASD found the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality instead of a release to groundwater.

The ASD theorized that this SSI was an issue with the location of the well rather than from a release from the facility. This alternative source demonstration confirmed that MW-5A may be impacted by its placement upgradient of a historic dewatering trench and cutoff trench. The ASD proposed a replacement well for MW-5A be installed downgradient of the dewatering trench and cutoff trench system. The new replacement well MW-5AR was installed prior to the May 2023 sampling event and the initial sampling results were compared to the existing MW-5A. Review of initial sampling results indicate that the theory may be correct. Monitoring of both MW-5A and MW-5AR will continue until the eight needed background samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease.

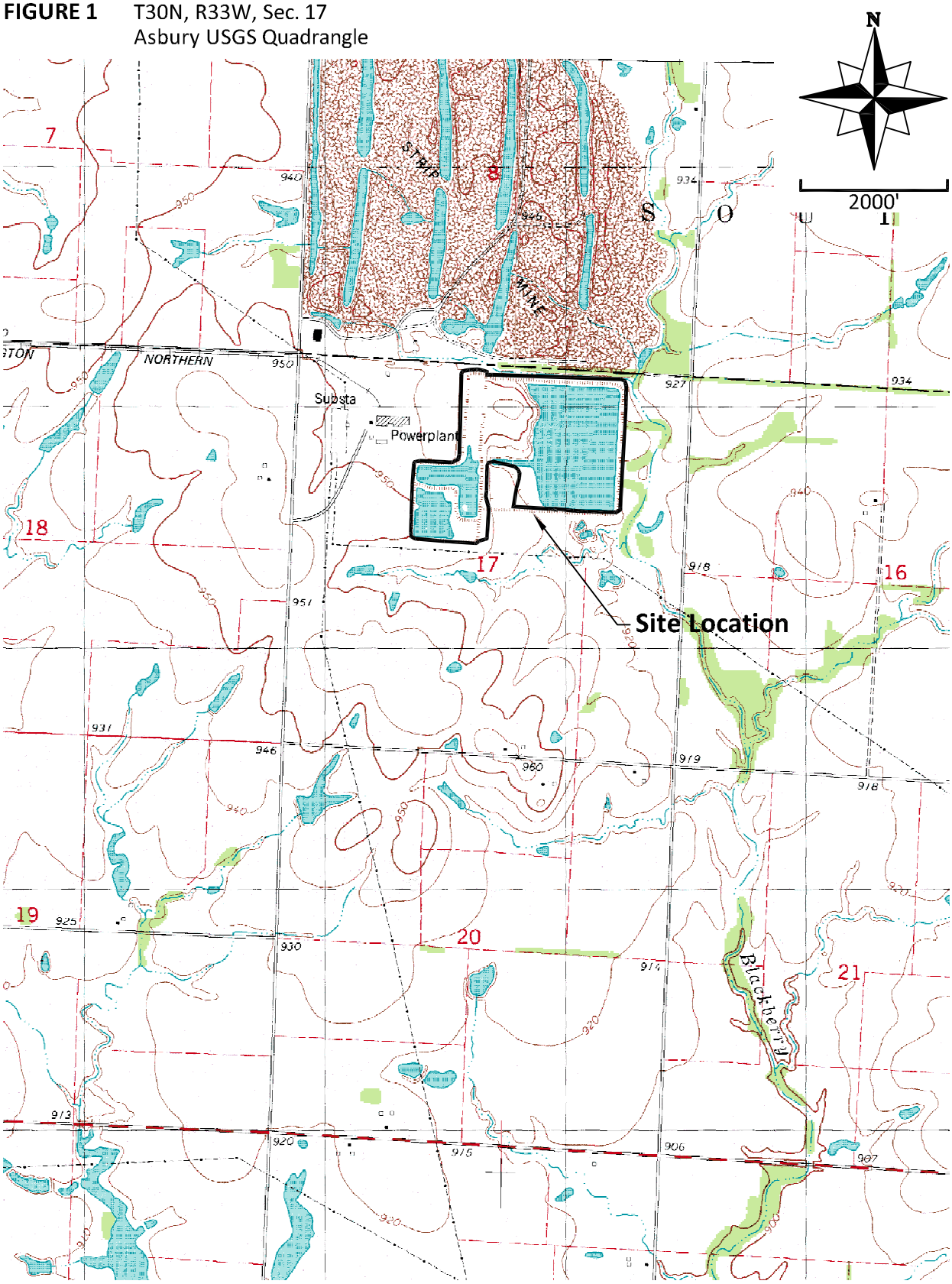
6.4 Proposed Actions

The facility will continue with the detection monitoring program per the EPA CCR Rule (§ 257.94) on a semi-annual basis.

FIGURES

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event - May 2025
Site Location Map

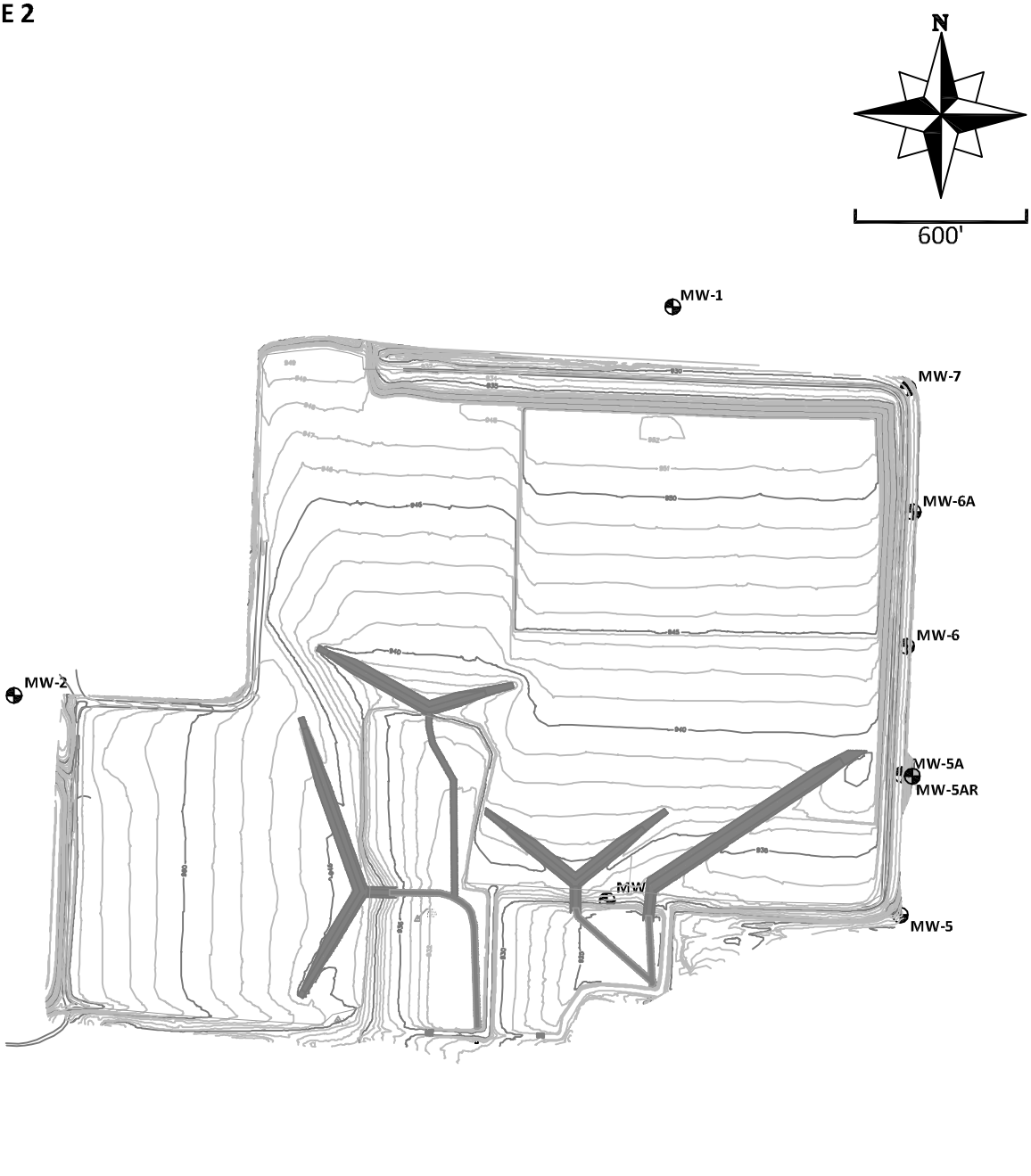
FIGURE 1 T30N, R33W, Sec. 17
Asbury USGS Quadrangle



June 2025

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event - May 2025
Groundwater Monitoring System

FIGURE 2



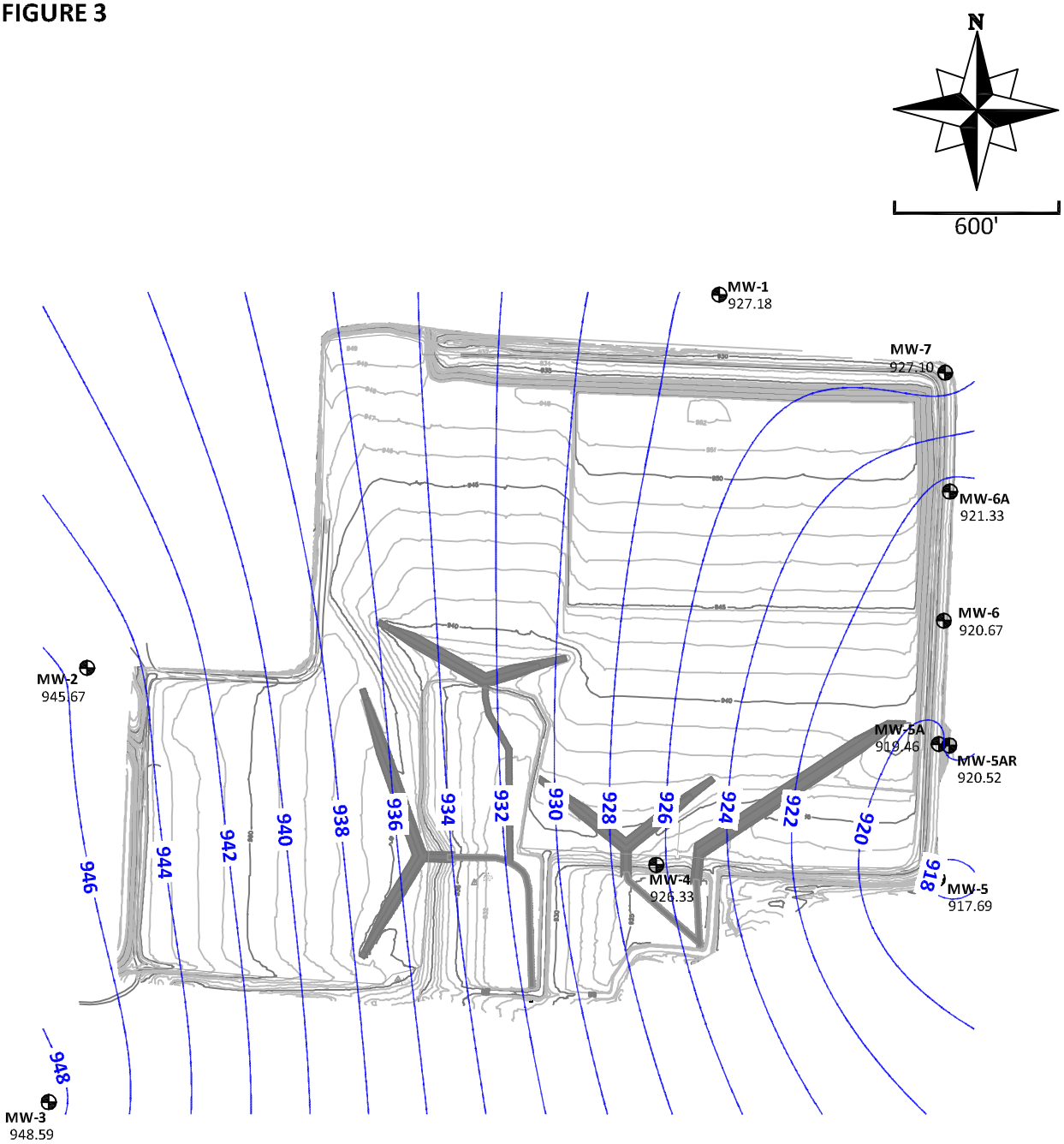
Well ID	Northing	Easting
MW-1	435789.71	2765168.83
MW-2	434428.56	2762861.43
MW-3	432844.71	2762721.27
MW-4	433709.70	2764938.79
MW-5	433659.19	2765966.39
MW-5A	434150.39	2765969.77
MW-5AR	434145.71	2766008.17
MW-6	434600.94	2765988.47
MW-6A	435071.72	2766010.58
MW-7	435505.31	2765993.01

Legend

Monitoring Well

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event - May 2025
Groundwater Piezometric Surface Map

FIGURE 3



Well ID	Northing	Easting	Top of Casing	Static Water Level (BTOC)	Static Water Level
MW-1	435789.71	2765168.83	934.50	7.32	927.18
MW-2	434428.56	2762861.43	949.50	3.83	945.67
MW-3	432844.71	2762721.27	950.16	1.57	948.59
MW-4	433709.70	2764938.76	934.29	7.96	926.33
MW-5	433659.19	2765966.39	920.20	2.51	917.69
MW-5A	434150.39	2765969.77	929.76	10.30	919.46
MW-5AR	434145.71	2766008.17	923.92	3.40	920.52
MW-6	434600.94	2765988.47	929.85	9.18	920.67
MW-6A	435071.72	2766010.58	929.61	8.28	921.33
MW-7	435505.31	2765993.01	931.14	4.04	927.10

Legend

⊕ Monitoring Well

APPENDIX 1

EPA/MDNR Correspondence

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

NOV 02 2017

Mr. Kavan Stull, Senior Environmental Coordinator
Empire District
602 South Joplin Avenue
Joplin, MO 64802

RE: Site Characterization Workplan

Dear Mr. Stull:

The Missouri Department of Natural Resources has reviewed the document "Site Characterization Workplan" dated May 16, 2017. The site has undergone extensive characterization regarding construction of a coal combustion residual (CCR) landfill near the CCR impoundments. The department's Water Protection Program has determined, through consulting with the Missouri Geological Survey, this characterization is sufficient and may be used in whole to complete the required monitoring of the sub-surface conditions at the site. Additional submittal of site characterization is not necessary, as the previous submittal meets the requirement for special condition 19(b) of the Missouri State Operating Permit MO-0095362. The facility may proceed with the next step laid out in the permit; special condition 19(c). Enclosed is the Missouri Geological Survey concurrence.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to 10 CSR 20 1.020 and Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC is by mail at Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, by phone at 573-751-2422, by fax at 573-751-5018, and by website at www.oa.mo.gov/ahc.

If you have any questions, please do not hesitate to contact Ms. Pam Hackler by mail at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176, by phone at 573-526-3386; or by email at pam.hackler@dnr.mo.gov. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

Michael J. Abbott, Chief
Operating Permits Section

MJA/php

Enclosure

c: Mr. Randall Willoughby, Southwest Regional Office

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

MEMORANDUM

SWR18011
Jasper County

DATE: October 18, 2017

TO: Pam Hackler- WPP- Industrial Wastewater Unit

FROM: Fletcher N. Bone, Geologist, Environmental Geology Section, Geological Survey Program, MGS

Fletcher N. Bone

STATE OF MISSOURI
REGISTERED GEOLOGIST
2014000148
October 18, 2017

SUBJECT: Site characterization for existing CCR impoundments
Asbury Power Plant Site Characterization Work Plan- CCR
37 21 22.66 Latitude, -94 35 4.79 Longitude,
Jasper County, Missouri

The Missouri Geological Survey (MGS) has reviewed the documents titled, 'NPDES Permit MO-0095362 Asbury Power Plant, Jasper County, Missouri, Site Characterization Work Plan', prepared by Empire District Electric Company, dated September 8, 2017 and 'Site Characterization Work Plan, Coal Combustion Residuals Impoundments, Empire Electric Facility - Permit MO-0095362, Jasper County, Missouri, Geotechnology Project No. J021738.03', prepared by Geotechnology Inc., dated May 16, 2017. The MGS offers the following comment.

General Comment:

The MGS agrees that the existing Coal Combustion Residuals (CCR) impoundments (site 1) do not need further site characterization, at this time. The site characterization performed, as described in the Detailed Site Investigation Report (DSI), dated January 21, 2015, at the proposed CCR impoundment (site 2) that is approximately 1,000 feet south of the existing CCR impoundments (site 1), coupled with the geologic and hydrologic data provided that pertains to the existing CCR impoundments (site 1) (1996 to present data), provides adequate characterization of the geology and hydrology of the site 1. The geologic and hydrologic settings of both sites are similar, with geologic boring logs and potentiometric data of both sites being compared. The hydraulic conductivity testing conducted at the proposed CCR site (site 2) has demonstrated that there is a low potential for groundwater contamination for this area.

If you are in need of further assistance from our office or have questions regarding this evaluation please feel free to contact me at (573) 368-2161.

Drew Landoll

From: Snellen, Greg <greg.snellen@dnr.mo.gov>
Sent: Tuesday, January 21, 2020 3:34 PM
To: Drew Landoll
Cc: aston.robert@epa.gov; Nagel, Chris; Snellen, Greg
Subject: RE: EPA Request for Information regarding CCR Units

Good afternoon Drew,

The Environmental Protection Agency (EPA) has been working to verify data on facility specific CCR websites required by 40 CFR 257 at the national level. EPA headquarters provided a list of inquiries to the EPA regions and requested they work with the states to answer their questions. States were given a choice as to the amount of involvement they could have with the information gathering. Missouri elected to take the lead on contacting the facilities in the state, providing the information requested by the EPA and relaying the answers back.

For your company, the EPA has questions about facilities and units which may be seeking an extension under the alternate closure provisions in 2020 and what type of extension may be requested.

They provided the following list of units:

Region	State	Part A Extension	Plant Name	Unit Name	Unit Type	Op Status	Unit Class	NOI Type	NOI Date	Alterr NOI
7	MO		Asbury	Lower Pond	Surface Impoundment	Active	Existing			
7	MO		Asbury	Upper Pond	Surface Impoundment	Active	Existing			
7	MO		Asbury	South Pond	Surface Impoundment	Active	Existing			

EPA has requested a response on extensions by February 14, 2020.

Additionally, the EPA has the following question related to groundwater monitoring:

Facility	Location	Owner	Units	Geology	Problematic Use of Intra Well Comparisons	Problematic Alternate Source Determinations	Conclusions
Asbury Power Plant	Asbury MO	Empire District Electric Company	Upper Pond-unlined South Pond-unlined Lower Pond-unlined	Surficial unit of clay, clayey sand, and silt approximately 15 to 25 feet thick underlain by Warner Sandstone approximately 25-30 feet thick in the southern portion of the site and the Riverton Shale in the northern area of the site	Analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells. Consequently, inter well comparisons are feasible and would be preferable in the absence of compelling reasons to use intra well analysis		While there are no boring logs in the documents to confirm that the wells are screened in the same geologic unit, consistency in the field parameters and the description of the geology suggest that the wells are screened in the sandstone. The analytical results indicate consistent differences in contaminant concentrations

Facility	Location	Owner	Units	Geology	Problematic Use of Intra Well Comparisons	Problematic Alternate Source Determinations	Conclusions
							between upgradient and downgradient wells, consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra wells analyses

At this time, there is not a deadline for this request.

Please let the Department know if you have any questions. You can also direct inquires to Bob Aston with EPA Region 7 who is copied on this email.

Thank you

Greg Snellen
Environmental Supervisor
Waste Management Program
573-526-8779

We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at https://www.surveymonkey.com/r/MoDNRsurvey. Thank you.

From: Aston, Robert
Sent: Friday, January 10, 2020 7:48 AM
To: Nagel, Chris <Christopher.Nagel@dnr.mo.gov>; Snellen, Greg <greg.snellen@dnr.mo.gov>
Cc: Martin, Mike <Martin.Mike@epa.gov>; Kloeckner, Jane <Kloeckner.Jane@epa.gov>; Catlin, Kelley <Catlin.Kelley@epa.gov>; Werner, Leslye <Werner.Leslye@epa.gov>; Hayworth, Brad <Hayworth.Brad@epa.gov>
Subject: CCR workload

Chris and Greg,

As a follow-up to our call on Wednesday

On Monday December 2, 2019 EPA published in the Federal Register a proposed rule for the Disposal of Coal Combustion Residuals From Electric Utilities: A Holistic Approach to Closure Part A: Deadline To Initiate Closure. The major elements of this proposed rule include:

- Definition of Lined Unit (removing a clay-lined unit from the definition),
- New initiation of Closure and Cease Receipt of Waste Deadline of August 31, 2020,
- New Alternate Closure Provisions for surface impoundment: Extensions to the initiation of closure

Nationally, EPA is gathering data to determine the number of facilities and units which may be seeking an extension under the alternate closure provisions in 2020 and is tasking the regions to work with our state partners and the facilities to determine the number of such facilities and units and what type of extension may be requested. Region 7 is seeking the state's assistance in gathering this information.

To be eligible for an extension the surface impoundment needs to be:

- An existing surface impoundment (eligible inactive surface impoundments should already be closing)
- An unlined or "clay-lined" surface impoundment
- Passed all location restrictions or only failed the uppermost aquifer restriction
  - Those that failed multiple location restrictions or did not post should have ceased receipt of waste in April 2019

This proposed rule offers facilities three options with regards to an extension

1.) Three month self-implementing extension (§ 257.103(e)(1)). Under this provision the surface impoundment must cease receipt of waste no later than November 30, 2020, and the facility must document certain conditions and certify "that the CCR and/or non-CCR waste streams must continue to be managed in that CCR surface impoundment to allow the facility to complete the measures necessary to provide alternative disposal capacity, either on-site or off-site of the facility" on its publicly available website no later than August 31, 2020.

2.) Site specific alternative to initiation of closure deadline due to lack of disposal capacity (§ 257.103(f)(1)). This provision allows facilities to submit demonstrations to EPA for approval for a specific amount of time to be able to continue to use their surface impoundment while developing alternate capacity for the CCR and non-CCR waste streams. This extension allows the facility to continue to use a unit (surface impoundment) for a maximum of 5 years, until October 15, 2023. Under this extension, facilities are required to submit their demonstrations to EPA no later than June 30, 2020.

3.) Site specific alternative to initiation of closure deadline due to Permanent Cessation of Coal Fired Boiler(s) by a Date Certain (§ 257.103(f)(2)): If a facility is ceasing generation of coal fired boiler(s) by a date certain, then the facility must complete closure by October 17, 2023 for surface impoundments less than 40 acres and by October 17, 2028 for surface impoundments larger than 40 acres. The facility is required to submit a demonstration to EPA for approval to continue to use their CCR surface impoundments. Under this extension, demonstrations are required to be submitted to EPA for approval no later than May 15, 2020.

As you can see above, the deadlines for requesting extensions are approaching quickly and will become effective when the proposed rule is final. EPA is requesting assistance from the regions, states, and facilities to estimate the number and types of extensions facility owners/operators may be requesting. EPA headquarters has developed a list (attached) of facilities which may be eligible for extensions by EPA Region and State. This list was developed by examining information included on individual facility web sites which are required as part of the CCR regulations. The list of potential sites in Missouri has been attached (attached Excel file) to this email. EPA headquarters has requested that individual regions reach out to their state counterparts to identify facility contacts and reach out to those contacts to determine which facilities and units may be requesting an extension and which type of extension may be requested. EPA headquarters has requested that this information be collected by February 14, 2020.

As part of the effort to determine what type of an extension a facility may need, EPA would also like the state's assistance in obtaining input regarding an estimate of the length of the extension that may be requested by the facility owners/operators. As part of the discussions, we need an estimate regarding the length of the extension. For example, EPA needs to estimate the following:

- Facilities that will not need an extension
- Facilities that will only need till November 2020 (short term extension)
- Longer than November – need about 6 months more
- Longer than November – need about 1 year
- Longer than November – need longer than 18 months

EPA is collecting this data in order to estimate the potential workload which could be associated with reviewing the above mentioned extension requests.

In addition, EPA headquarters routinely reviews the information posted on individual facility web sites. As part of that review EPA headquarters has identified sites in each region where specific facility information which is required to be posted is either missing, incomplete or technical questions exist. As part of this review EPA has developed two lists. See attached. One list deals with compliance issues related to documents which are, or in some cases are not, posted on the specific facility websites. The second list deals with groundwater questions related to Alternate Source Demonstrations and Intrawell analyses. With regards to the list dealing with compliance issues related to documents, EPA headquarters has requested that the regions work with their state counterparts to identify the appropriate facility contact. The plan is that EPA Headquarters would take the lead in coordination with the regions and states to contact the facilities to discuss and remedy the identified issues. With regards to the second list dealing with Alternate Source Demonstrations, EPA headquarters has requested that the regions work with their state counterparts to identify the appropriate facility contacts. The regions and or the states would then take the lead to address any identified issues. No specific timeframe has been established to address the questions related to either of the above lists. Region 7 anticipates working closely with the state in addressing these issues.

It should be noted that EPA headquarters routinely reviews CCR facility websites and could identify additional questions. If that should occur Region 7 would again reach out to the states.

At your convenience I would like to follow-up with you on the above issues sometime next week to discuss Missouri's perspective and any comments you may have. If you have any questions please do not hesitate to call or email me.

Thanks

Bob Aston
USEPA Region 7
(913)551-7392

APPENDIX 2

Monitoring Well Field Inspection Sheets and Field Notes

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 2

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration.

Date / Time Initiated: 5- 13 -25 @ 1:11 Date / Time Completed: 5 – 13 -25

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
1:14	200	600	17.2	5.76	0.695	4.45	86.5	5.99	Clear
:16	|	1000	17.3	5.69	0.692	3.32	91.1	3.97	|
:18	|	1400	17.3	5.68	0.693	2.81	93.3	3.54	|
:20	√	1600	17.4	5.67	0.691	2.48	95.3	4.00	√

Time sampled 1:20

Weather Conditions Sunny, 75°F

Water Level Start 3.83'

Water Level Finish 6.28

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 3

Sample [X] Blind Duplicate [ ] Field Blank [X]

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration.

Date / Time Initiated: 5- 14 -25 @ 11:20 Date / Time Completed: 5- 14 -25

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
11:22	200	400	18.3	5.85	1.265	4.64	21.2	23.73	Clear
:24	↓	800	18.1	5.84	1.262	3.84	21.2	20.20	↓
:26		1200	18.0	5.83	1.260	3.38	21.57	20.67	
:28	↓	1600	17.6	5.83	1.258	2.89	24.4	28.52	↓

Time sampled 11:30 / 11:40 Field Blank

Weather Conditions Sunny, 60°F

Water Level Start 1.57'

Water Level Finish 1.62'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature Ryan Ortbals

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 4

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1800 mL post pump calibration.

Date / Time Initiated: 5- 13 -25 @ 1:55 Date / Time Completed: 5 - 13 -25

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
1:58	200	600	17.4	6.45	1.186	4.89	102.2	13.40	Clear
2:00	↓	1000	17.1	6.46	1.190	3.90	101.4	14.58	↓
:02		1400	16.9	6.47	1.188	2.99	101.0	16.54	
:04	↓	1800	16.9	6.47	1.189	2.89	100.9	10.70	

Time sampled 2:05

Weather Conditions Sunny, 80°F

Water Level Start 7.96'

Water Level Finish 12.97'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature Ryan

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 5

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration.

Date / Time Initiated: 5- 13 -25 @ 2:37 Date / Time Completed: 5- 13 -25

Well Purged To Dryness?: Y (N) Gas Detected? Y (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
2:37	200	400	17.7	7.27	0.940	4.30	82.9	13.65	Clear
:39	↓	800	17.7	7.28	0.938	3.48	81.8	14.84	↓
:41	↓	1200	17.5	7.28	0.936	2.77	80.7	16.15	↓
:43	↓	1600	17.3	7.28	0.936	2.48	80.0	23.42	↓

Time sampled 2:45 / 3:00 Replicate

Weather Conditions Sunny, 80°F

Water Level Start 2.51'

Water Level Finish 11.22'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 5A

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2000 mL post pump calibration.

Date / Time Initiated: 5- 14 -25 @ 9:03 Date / Time Completed: 5 – 14 -25

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
9:07	200	800	15.9	6.74	3.980	5.60	98.7	31.52	Clear
:09	↓	1200	16.2	6.76	3.994	4.00	100.7	35.45	↓
:11	↓	1600	16.0	6.77	3.996	3.66	101.6	39.44	↓
:13	↓	2000	15.9	6.77	3.997	3.30	1030	43.14	↓

Time sampled 9:15

Weather Conditions Sunny, 70°F

Water Level Start 10.30'

Water Level Finish 17.58

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 5AR

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2000 mL post pump calibration.

Date / Time Initiated: 5- 14 -25 @ 8:25 Date / Time Completed: 5- 14 -25

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
8:29	200	800	16.1	7.14	1.407	5.05	-68.4	40.52	Clear
:31	↓	1200	16.2	7.16	1.405	4.07	-74.5	38.16	↓
:33	↓	1600	16.2	7.17	1.404	3.55	-78.2	45.44	↓
:35	↓	2000	15.8	7.00	1.403	3.09	-80.6	59.74	↓

Time sampled 8:35

Weather Conditions Sunny, 65°F

Water Level Start 3.40'

Water Level Finish 11.98'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature Ryan

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events. Note: MW-5-AR first sampled May 2023

Constituent	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.83	5.08	6.30	6.83	6.82	
Specific Conductance	umhos/cm	GW	0.786	1.132	2.083	0.841	1.769	
Total Well Depth	ft	Level						
Average GW Depth	ft	Only	1.24	0.4	5.39	1.32	6.92	
Average GW Drop	ft							
2 System Volumes (Min Purged Amount)	mL	DON'T SAMPLE	800	800	800	800	800	

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 6

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2200 mL post pump calibration.

Date / Time Initiated: 5 – 14 -25 @ 9:40 Date / Time Completed: 5 – 14 -25

Well Purged To Dryness?: Y (N) Gas Detected? Y (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
9:45	200	1000	17.8	7.04	2.382	5.05	105.5	30.48	Clear
0:47	200	1400	17.3	7.04	2.389	4.00	102.2	21.53	
:49	↓	1800	17.0	7.04	2.378	3.34	99.1	20.05	
:51	↓	2200	17.0	7.06	2.376	2.88	95.5	18.88	↓

Time sampled 9:55

Weather Conditions Sunny, 75°F

Water Level Start 9.18'

Water Level Finish 17.41'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature Ryan Ortbals

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	Y	(N)	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Historical Data: Average of sampling events

Constituent	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	6.72	6.87	6.12					
Specific Conductance	umhos/cm	1.900	1.601	2.699					
Total Well Depth	ft								
Average GW Depth	ft	7.86	7.28	3.04					
Average GW Drop	ft								
2 System Volumes (Min Purged Amount)	mL	800	800	800					

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 6A

Sample ☐ Blind Duplicate ☐ Field Blank ☐.

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2000 mL post pump calibration.

Date / Time Initiated: 5 – 14 -25 @ 10:20 Date / Time Completed: 5 – 14 -25

Well Purged To Dryness?: Y / (N) Gas Detected? Y (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
10:24	200	800	16.8	6.72	2.507	7.30	126.5	82.37	Clear
0 :26	↓	1200	17.0	6.65	2.526	6.74	124.0	93.16	↓
:28		1600	17.1	6.65	2.526	6.51	122.3	80.33	
:30	↓	2000	17.0	6.65	2.524	6.34	120.9	91.45	↓

Time sampled 10:30

Weather Conditions Sunny, 75°F

Water Level Start 8.28'

Water Level Finish 16.58'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events

Constituent	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	6.72	6.87	6.12					
Specific Conductance	umhos/cm	1.900	1.601	2.699					
Total Well Depth	ft								
Average GW Depth	ft	7.86	7.28	3.04					
Average GW Drop	ft								
2 System Volumes (Min Purged Amount)	mL	800	800	800					

MW-1 7.32'

2025 Field Sampling Log

Facility: Asbury CCR (Permit #) Monitoring Well ID: MW- 7

Sample [X] Blind Duplicate [ ] Field Blank [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration.

Date / Time Initiated: 5 – 13 -25 @ 3:33 Date / Time Completed: 5 – 13 -25

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
3:35	200	400	17.2	6.32	2.826	4.40	100.4	22.69	clear
0:37		800	17.0	6.27	2.884	3.60	40.1	18.90	
:39		1200	16.8	6.29	2.909	3.06	28.2	24.51	
:41	↓	1600	16.9	6.30	2.926	2.64	22.7	27.70	↓

Time sampled 3:45

Weather Conditions Sunny, 90°F

Water Level Start 4.04'

Water Level Finish 4.17'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Historical Data: Average of sampling events

Constituent	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	6.72	6.87	6.12					
Specific Conductance	umhos/cm	1.900	1.601	2.699					
Total Well Depth	ft								
Average GW Depth	ft	7.86	7.28	3.04					
Average GW Drop	ft								
2 System Volumes (Min Purged Amount)	mL	800	800	800					

APPENDIX 3

Analytical Results

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Rick Elgin
Midwest Environmental Consultants
2009 East McCarty Street
Suite 2
Jefferson City, Missouri 65101

Generated 6/23/2025 11:28:57 AM

JOB DESCRIPTION

ASBURY POND CCR

JOB NUMBER

180-190520-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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6/23/2025 11:28:57 AM

Authorized for release by
Gail Lage, Senior Project Manager
Gail.Lage@et.eurofinsus.com
(615)301-5741

Table of Contents

Job Narrative
180-190520-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/15/2025 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 3.4°C, 4.6°C, 4.7°C and 4.7°C.

HPLC/IC
Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-496509 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: MW-2 (180-190520-1), MW-4 (180-190520-3), MW-5 (180-190520-4), MW-5A (180-190520-5), MW-5AR (180-190520-6), MW-6 (180-190520-7), MW-6A (180-190520-8), MW-7 (180-190520-9) and DUPLICATE (AT MW-5) (180-190520-10). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: MW-3 (180-190520-2), MW-4 (180-190520-3), MW-5A (180-190520-5), MW-6 (180-190520-7), MW-6A (180-190520-8) and MW-7 (180-190520-9). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The laboratory control sample (LCS) for preparation batch 310-455101 and analytical batch 310-455977 recovered outside control limits for the following analytes: Thallium. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25
California	State	3122	05-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	05-31-25
Virginia	NELAP	460189	09-14-25
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-25

Laboratory: Eurofins Cedar Falls

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-25
Georgia	State	IA100001 (OR)	09-29-25
Illinois	NELAP	200024	11-30-25
Iowa	State	007	12-01-25
Kansas	NELAP	E-10341	01-31-26
Minnesota	NELAP	019-999-319	12-31-25
Minnesota (Petrofund)	State	3349	01-18-26
North Dakota	State	R-186	09-29-24 *
Oregon	NELAP	IA100001	09-29-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	08-02-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-190520-1	MW-2	Water	05/13/25 01:20	05/15/25 09:00
180-190520-2	MW-3	Water	05/14/25 11:30	05/15/25 09:00
180-190520-3	MW-4	Water	05/13/25 02:05	05/15/25 09:00
180-190520-4	MW-5	Water	05/13/25 02:45	05/15/25 09:00
180-190520-5	MW-5A	Water	05/14/25 09:15	05/15/25 09:00
180-190520-6	MW-5AR	Water	05/14/25 08:35	05/15/25 09:00
180-190520-7	MW-6	Water	05/14/25 09:55	05/15/25 09:00
180-190520-8	MW-6A	Water	05/14/25 10:30	05/15/25 09:00
180-190520-9	MW-7	Water	05/13/25 03:45	05/15/25 09:00
180-190520-10	DUPLICATE (AT MW-5)	Water	05/13/25 03:00	05/15/25 09:00
180-190520-11	FIELD BLANK	Water	05/14/25 11:40	05/15/25 09:00

Method Summary

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
EPA 6020B	Metals (ICP/MS)	SW846	EET CF
EPA 7470A	Mercury (CVAA)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Field Sampling	Field Sampling	EPA	EET PIT
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Client Sample ID: MW-2
Lab Sample ID: 180-190520-1

Date Collected: 05/13/25 01:20
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		2	1 mL	1 mL	496509	05/23/25 16:14	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:21	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/13/25 02:20	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-3
Lab Sample ID: 180-190520-2

Date Collected: 05/14/25 11:30
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496625	05/27/25 14:18	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	496625	05/27/25 15:14	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:30	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/14/25 12:30	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-4
Lab Sample ID: 180-190520-3

Date Collected: 05/13/25 02:05
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	496625	05/27/25 15:32	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 16:30	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:32	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/13/25 03:05	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5
Lab Sample ID: 180-190520-4

Date Collected: 05/13/25 02:45
Matrix: Water

Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 17:32	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Analysis	EPA 9056A		5	1 mL	1 mL	496509	05/23/25 17:48	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:35	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/13/25 03:45	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5A
Lab Sample ID: 180-190520-5

Date Collected: 05/14/25 09:15
Matrix: Water

Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		50	1 mL	1 mL	496625	05/27/25 15:51	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		2.5	1 mL	1 mL	496509	05/23/25 18:03	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:44	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/14/25 10:15	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5AR
Lab Sample ID: 180-190520-6

Date Collected: 05/14/25 08:35
Matrix: Water

Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 18:55	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	496509	05/23/25 19:11	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455552	05/22/25 18:41	NFT2	EET CF
	Instrument ID: ICPMS7800									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455977	05/28/25 13:06	NFT2	EET CF
	Instrument ID: ICPMS7800									

Client Sample ID: MW-5AR
Lab Sample ID: 180-190520-6

Date Collected: 05/14/25 08:35
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:47	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	7470A			30 mL	40 mL	455116	05/20/25 13:19	F5MW	EET CF
Total/NA	Analysis	EPA 7470A		1			455352	05/21/25 11:19	F5MW	EET CF
	Instrument ID: Juliet									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496284	05/20/25 16:38	LWM	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1004.84 mL	1.0 g	719399	05/27/25 08:31	OGC	EET SL
Total/NA	Analysis	9315		1			723115	06/18/25 21:33	SWS	EET SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1004.84 mL	1.0 g	719400	05/27/25 08:37	OGC	EET SL
Total/NA	Analysis	9320		1			723121	06/18/25 11:41	FLC	EET SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			723866	06/23/25 10:17	SCB	EET SL
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/14/25 09:35	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-6
Lab Sample ID: 180-190520-7

Date Collected: 05/14/25 09:55
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		50	1 mL	1 mL	496625	05/27/25 16:09	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 19:26	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:50	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	496284	05/20/25 16:38	LWM	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/14/25 10:55	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-6A
Lab Sample ID: 180-190520-8

Date Collected: 05/14/25 10:30
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		50	1 mL	1 mL	496625	05/27/25 16:28	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 19:57	ERP	EET PIT
	Instrument ID: INUVION									

Lab Chronicle

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-6A
Lab Sample ID: 180-190520-8
Date Collected: 05/14/25 10:30
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		10			455721	05/23/25 15:53	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	496284	05/20/25 16:38	LWM	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/14/25 11:30	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-7
Lab Sample ID: 180-190520-9
Date Collected: 05/13/25 03:45
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		50	1 mL	1 mL	496625	05/27/25 16:46	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 21:00	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:56	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/13/25 04:45	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUPLICATE (AT MW-5)
Lab Sample ID: 180-190520-10
Date Collected: 05/13/25 03:00
Matrix: Water
Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 21:31	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	496509	05/23/25 21:47	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 15:59	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496199	05/19/25 17:19	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			496071	05/13/25 04:00	FDS	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Midwest Environmental Consultants
Project/Site: ASBURY POND CCR

Job ID: 180-190520-2

Client Sample ID: FIELD BLANK

Lab Sample ID: 180-190520-11

Date Collected: 05/14/25 11:40

Matrix: Water

Date Received: 05/15/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	496509	05/23/25 22:02	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3005A			50 mL	50 mL	455101	05/20/25 09:00	QTZ5	EET CF
Total/NA	Analysis	EPA 6020B		1			455721	05/23/25 16:01	ZRI4	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	496285	05/20/25 16:41	LWM	EET PIT
	Instrument ID: NOEQUIP									

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: EET CF

Batch Type: Prep

F5MW = Alexander Wilmer

QTZ5 = Anna Martinez

Batch Type: Analysis

F5MW = Alexander Wilmer

NFT2 = Tyler Chettinger

ZRI4 = Christopher Britt

Lab: EET PIT

Batch Type: Analysis

ERP = Evan Papak

FDS = Sampler Field

LWM = Leslie McIntire

SNR = Sabra Richart

Lab: EET SL

Batch Type: Prep

OGC = Olivia Carr

Batch Type: Analysis

FLC = Fernando Cruz

SCB = Sarah Bernsen

SWS = Seth Stubblefield

Client Sample Results

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-2
Lab Sample ID: 180-190520-1

Date Collected: 05/13/25 01:20
Matrix: Water

Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		2.0	1.4	mg/L			05/23/25 16:14	2
Fluoride	0.17	J	0.20	0.052	mg/L			05/23/25 16:14	2
Sulfate	100		2.0	1.5	mg/L			05/23/25 16:14	2

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	F1	100	82	ug/L		05/20/25 09:00	05/23/25 15:21	1
Calcium	24000		500	190	ug/L		05/20/25 09:00	05/23/25 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	380		10	10	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.67				SU			05/13/25 02:20	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-3
Lab Sample ID: 180-190520-2
Date Collected: 05/14/25 11:30
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		1.0	0.71	mg/L			05/27/25 14:18	1
Fluoride	0.11		0.10	0.026	mg/L			05/27/25 14:18	1
Sulfate	500		10	7.6	mg/L			05/27/25 15:14	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		05/20/25 09:00	05/23/25 15:30	1
Calcium	99000		500	190	ug/L		05/20/25 09:00	05/23/25 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	890		10	10	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.83				SU			05/14/25 12:30	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-4
Lab Sample ID: 180-190520-3

Date Collected: 05/13/25 02:05
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		1.0	0.71	mg/L			05/23/25 16:30	1
Fluoride	0.18		0.10	0.026	mg/L			05/23/25 16:30	1
Sulfate	380		10	7.6	mg/L			05/27/25 15:32	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		100	82	ug/L		05/20/25 09:00	05/23/25 15:32	1
Calcium	110000		500	190	ug/L		05/20/25 09:00	05/23/25 15:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	820		10	10	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.47				SU			05/13/25 03:05	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-5
Lab Sample ID: 180-190520-4
Date Collected: 05/13/25 02:45
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		1.0	0.71	mg/L			05/23/25 17:32	1
Fluoride	0.31		0.10	0.026	mg/L			05/23/25 17:32	1
Sulfate	140		5.0	3.8	mg/L			05/23/25 17:48	5

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	82	ug/L		05/20/25 09:00	05/23/25 15:35	1
Calcium	84000		500	190	ug/L		05/20/25 09:00	05/23/25 15:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	590		10	10	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.28				SU			05/13/25 03:45	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-5A
Lab Sample ID: 180-190520-5
Date Collected: 05/14/25 09:15
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		2.5	1.8	mg/L			05/23/25 18:03	2.5
Fluoride	0.37		0.25	0.065	mg/L			05/23/25 18:03	2.5
Sulfate	1900		50	38	mg/L			05/27/25 15:51	50

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	82	ug/L		05/20/25 09:00	05/23/25 15:44	1
Calcium	430000		500	190	ug/L		05/20/25 09:00	05/23/25 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3200		40	40	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.77				SU			05/14/25 10:15	1

Client Sample ID: MW-5AR
Lab Sample ID: 180-190520-6
Date Collected: 05/14/25 08:35
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.5**		1.0	0.71	mg/L			05/23/25 18:55	1
Fluoride	**0.30**		0.10	0.026	mg/L			05/23/25 18:55	1
Sulfate	**410**		10	7.6	mg/L			05/23/25 19:11	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	1.0	ug/L		05/20/25 09:00	05/22/25 18:41	1
Arsenic	**2.0**		2.0	0.53	ug/L		05/20/25 09:00	05/22/25 18:41	1
Barium	**16**		2.0	0.66	ug/L		05/20/25 09:00	05/22/25 18:41	1
Beryllium	ND		1.0	0.33	ug/L		05/20/25 09:00	05/23/25 15:47	1
Boron	**400**		100	82	ug/L		05/20/25 09:00	05/23/25 15:47	1
Cadmium	ND		0.20	0.10	ug/L		05/20/25 09:00	05/22/25 18:41	1
Calcium	**140000**		500	190	ug/L		05/20/25 09:00	05/23/25 15:47	1
Chromium	ND		5.0	1.8	ug/L		05/20/25 09:00	05/22/25 18:41	1
Cobalt	ND		0.50	0.17	ug/L		05/20/25 09:00	05/22/25 18:41	1
Lead	ND		0.50	0.33	ug/L		05/20/25 09:00	05/22/25 18:41	1
Lithium	**130**		10	2.9	ug/L		05/20/25 09:00	05/23/25 15:47	1
Molybdenum	ND		2.0	1.3	ug/L		05/20/25 09:00	05/22/25 18:41	1
Selenium	ND		5.0	1.4	ug/L		05/20/25 09:00	05/22/25 18:41	1
Thallium	ND	*+	1.0	0.57	ug/L		05/20/25 09:00	05/28/25 13:06	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00011	mg/L		05/20/25 13:19	05/21/25 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**980**		10	10	mg/L			05/20/25 16:38	1

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.58**		0.419	0.443	1.00	0.343	pCi/L	05/27/25 08:31	06/18/25 21:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.9*		*30 - 110*	*05/27/25 08:31*	*06/18/25 21:33*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.91**		0.592	0.618	1.00	0.710	pCi/L	05/27/25 08:37	06/18/25 11:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.9*		*30 - 110*	*05/27/25 08:37*	*06/18/25 11:41*	*1*
Y Carrier	*82.2*		*30 - 110*	*05/27/25 08:37*	*06/18/25 11:41*	*1*

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-5AR
Lab Sample ID: 180-190520-6
Date Collected: 05/14/25 08:35
Matrix: Water
Date Received: 05/15/25 09:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.50		0.725	0.760	5.00	0.710	pCi/L		06/23/25 10:17	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.20				SU			05/14/25 09:35	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-6
Lab Sample ID: 180-190520-7

Date Collected: 05/14/25 09:55
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38		1.0	0.71	mg/L			05/23/25 19:26	1
Fluoride	0.43		0.10	0.026	mg/L			05/23/25 19:26	1
Sulfate	1100		50	38	mg/L			05/27/25 16:09	50

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	82	ug/L		05/20/25 09:00	05/23/25 15:50	1
Calcium	250000		500	190	ug/L		05/20/25 09:00	05/23/25 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7700		40	40	mg/L			05/20/25 16:38	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.06				SU			05/14/25 10:55	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-6A
Lab Sample ID: 180-190520-8

Date Collected: 05/14/25 10:30
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88		1.0	0.71	mg/L			05/23/25 19:57	1
Fluoride	0.27		0.10	0.026	mg/L			05/23/25 19:57	1
Sulfate	1300		50	38	mg/L			05/27/25 16:28	50

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		1000	820	ug/L		05/20/25 09:00	05/23/25 15:53	10
Calcium	210000		5000	1900	ug/L		05/20/25 09:00	05/23/25 15:53	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2100		20	20	mg/L			05/20/25 16:38	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.65				SU			05/14/25 11:30	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: MW-7
Lab Sample ID: 180-190520-9
Date Collected: 05/13/25 03:45
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		1.0	0.71	mg/L			05/23/25 21:00	1
Fluoride	0.31		0.10	0.026	mg/L			05/23/25 21:00	1
Sulfate	1800		50	38	mg/L			05/27/25 16:46	50

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	82	ug/L		05/20/25 09:00	05/23/25 15:56	1
Calcium	450000		500	190	ug/L		05/20/25 09:00	05/23/25 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2700		20	20	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.30				SU			05/13/25 04:45	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: DUPLICATE (AT MW-5)

Lab Sample ID: 180-190520-10

Date Collected: 05/13/25 03:00

Matrix: Water

Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		1.0	0.71	mg/L			05/23/25 21:31	1
Fluoride	0.34		0.10	0.026	mg/L			05/23/25 21:31	1
Sulfate	130		10	7.6	mg/L			05/23/25 21:47	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	260		100	82	ug/L		05/20/25 09:00	05/23/25 15:59	1
Calcium	78000		500	190	ug/L		05/20/25 09:00	05/23/25 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	600		10	10	mg/L			05/19/25 17:19	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.28				SU			05/13/25 04:00	1

Client: Midwest Environmental Consultants
Job ID: 180-190520-2
Project/Site: ASBURY POND CCR

Client Sample ID: FIELD BLANK
Lab Sample ID: 180-190520-11

Date Collected: 05/14/25 11:40
Matrix: Water
Date Received: 05/15/25 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.9**		1.0	0.71	mg/L			05/23/25 22:02	1
Fluoride	**0.70**		0.10	0.026	mg/L			05/23/25 22:02	1
Sulfate	ND		1.0	0.76	mg/L			05/23/25 22:02	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		05/20/25 09:00	05/23/25 16:01	1
Calcium	**27000**		500	190	ug/L		05/20/25 09:00	05/23/25 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**170**		10	10	mg/L			05/20/25 16:41	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-496509/6
Matrix: Water
Analysis Batch: 496509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			05/23/25 11:22	1
Fluoride	ND		0.10	0.026	mg/L			05/23/25 11:22	1
Sulfate	ND		1.0	0.76	mg/L			05/23/25 11:22	1

Lab Sample ID: LCS 180-496509/7
Matrix: Water
Analysis Batch: 496509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	53.6		mg/L		107	80 - 120
Fluoride	2.50	2.55		mg/L		102	80 - 120
Sulfate	50.0	47.3		mg/L		95	80 - 120

Lab Sample ID: 180-190515-D-9 MS
Matrix: Water
Analysis Batch: 496509

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25	F1	50.0	55.2	F1	mg/L		61	80 - 120
Fluoride	0.19		2.50	2.69		mg/L		100	80 - 120
Sulfate	38	F1	50.0	49.8	F1	mg/L		23	80 - 120

Lab Sample ID: 180-190515-D-9 MSD
Matrix: Water
Analysis Batch: 496509

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25	F1	50.0	55.4	F1	mg/L		61	80 - 120	0	15
Fluoride	0.19		2.50	2.71		mg/L		101	80 - 120	1	15
Sulfate	38	F1	50.0	49.8	F1	mg/L		23	80 - 120	0	15

Lab Sample ID: MB 180-496625/6
Matrix: Water
Analysis Batch: 496625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			05/27/25 10:38	1
Fluoride	ND		0.10	0.026	mg/L			05/27/25 10:38	1
Sulfate	ND		1.0	0.76	mg/L			05/27/25 10:38	1

Lab Sample ID: LCS 180-496625/7
Matrix: Water
Analysis Batch: 496625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.5		mg/L		99	80 - 120
Fluoride	2.50	2.53		mg/L		101	80 - 120
Sulfate	50.0	49.7		mg/L		99	80 - 120

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-190599-D-1 MS
Matrix: Water
Analysis Batch: 496625

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	22		50.0	69.8		mg/L		96	80 - 120		
Fluoride	0.11		2.50	2.66		mg/L		102	80 - 120		
Sulfate	65		50.0	110		mg/L		89	80 - 120		

Lab Sample ID: 180-190599-D-1 MSD
Matrix: Water
Analysis Batch: 496625

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22		50.0	69.8		mg/L		96	80 - 120	0	15
Fluoride	0.11		2.50	2.60		mg/L		100	80 - 120	2	15
Sulfate	65		50.0	110		mg/L		90	80 - 120	0	15

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-455101/1-A
Matrix: Water
Analysis Batch: 455552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	1.0	ug/L		05/20/25 09:00	05/22/25 18:12	1
Arsenic	ND		2.0	0.53	ug/L		05/20/25 09:00	05/22/25 18:12	1
Barium	ND		2.0	0.66	ug/L		05/20/25 09:00	05/22/25 18:12	1
Cadmium	ND		0.20	0.10	ug/L		05/20/25 09:00	05/22/25 18:12	1
Chromium	2.46	J	5.0	1.8	ug/L		05/20/25 09:00	05/22/25 18:12	1
Cobalt	ND		0.50	0.17	ug/L		05/20/25 09:00	05/22/25 18:12	1
Lead	ND		0.50	0.33	ug/L		05/20/25 09:00	05/22/25 18:12	1
Lithium	ND		10	2.9	ug/L		05/20/25 09:00	05/22/25 18:12	1
Molybdenum	ND		2.0	1.3	ug/L		05/20/25 09:00	05/22/25 18:12	1
Selenium	ND		5.0	1.4	ug/L		05/20/25 09:00	05/22/25 18:12	1

Lab Sample ID: MB 310-455101/1-A
Matrix: Water
Analysis Batch: 455721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		1.0	0.33	ug/L		05/20/25 09:00	05/23/25 15:16	1
Boron	ND		100	82	ug/L		05/20/25 09:00	05/23/25 15:16	1
Calcium	ND		500	190	ug/L		05/20/25 09:00	05/23/25 15:16	1
Thallium	ND		1.0	0.57	ug/L		05/20/25 09:00	05/23/25 15:16	1

Lab Sample ID: MB 310-455101/1-A
Matrix: Water
Analysis Batch: 455977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0	0.57	ug/L		05/20/25 09:00	05/28/25 12:40	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-455101/2-A
Matrix: Water
Analysis Batch: 455552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	500	554	E	ug/L		111	80 - 120
Arsenic	500	502		ug/L		100	80 - 120
Barium	250	238		ug/L		95	80 - 120
Cadmium	250	239		ug/L		96	80 - 120
Chromium	250	240		ug/L		96	80 - 120
Cobalt	250	248		ug/L		99	80 - 120
Lead	500	486		ug/L		97	80 - 120
Lithium	500	449		ug/L		90	80 - 120
Molybdenum	500	487		ug/L		97	80 - 120
Selenium	1000	916	E	ug/L		92	80 - 120

Lab Sample ID: LCS 310-455101/2-A
Matrix: Water
Analysis Batch: 455721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	250	213		ug/L		85	80 - 120
Boron	500	432		ug/L		86	80 - 120
Calcium	5000	4520		ug/L		90	80 - 120

Lab Sample ID: LCS 310-455101/2-A
Matrix: Water
Analysis Batch: 455977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	100	140	*+	ug/L		140	80 - 120

Lab Sample ID: 180-190520-E-1-B MS
Matrix: Water
Analysis Batch: 455552

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	F1	500	569		ug/L		114	75 - 125
Barium	0.027	F1	250	289		ug/L		115	75 - 125
Cadmium	0.0010	F1	250	261		ug/L		104	75 - 125
Chromium	ND	F1	250	263		ug/L		105	75 - 125
Cobalt	0.0077	F1	250	276		ug/L		110	75 - 125
Lead	0.00071	F1	500	529		ug/L		106	75 - 125
Lithium	0.013	F1	500	523		ug/L		105	75 - 125
Molybdenum	ND	F1	500	543		ug/L		109	75 - 125
Selenium	ND	F1	1000	1030	E	ug/L		103	75 - 125

Lab Sample ID: 180-190520-E-1-B MS
Matrix: Water
Analysis Batch: 455721

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND	F1	500	622	E	ug/L		124	75 - 125
Beryllium	ND	F1	250	258		ug/L		103	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-190520-E-1-B MS — **Client Sample ID: MW-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455721 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND	F1	500	578		ug/L		116	75 - 125
Calcium	24000		5000	27700	4	ug/L		82	75 - 125

Lab Sample ID: 180-190520-E-1-B MS — **Client Sample ID: 180-190520-E-1-B MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455977 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	ND	F1 F2 *+	100	178	F1	ug/L		178	75 - 125

Lab Sample ID: 180-190520-E-1-C MSD — **Client Sample ID: MW-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455552 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	F1	500	565		ug/L		113	75 - 125	1	20
Barium	0.027	F1	250	289		ug/L		115	75 - 125	0	20
Cadmium	0.0010	F1	250	264		ug/L		105	75 - 125	1	20
Chromium	ND	F1	250	259		ug/L		104	75 - 125	1	20
Cobalt	0.0077	F1	250	279		ug/L		112	75 - 125	1	20
Lead	0.00071	F1	500	535		ug/L		107	75 - 125	1	20
Lithium	0.013	F1	500	516		ug/L		103	75 - 125	1	20
Molybdenum	ND	F1	500	536		ug/L		107	75 - 125	1	20
Selenium	ND	F1	1000	1030	E	ug/L		103	75 - 125	1	20

Lab Sample ID: 180-190520-E-1-C MSD — **Client Sample ID: MW-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455721 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND	F1	500	624	E	ug/L		125	75 - 125	0	20
Beryllium	ND	F1	250	260		ug/L		104	75 - 125	1	20
Boron	ND	F1	500	590		ug/L		118	75 - 125	2	20
Calcium	24000		5000	27800	4	ug/L		85	75 - 125	0	20

Lab Sample ID: 180-190520-E-1-C MSD — **Client Sample ID: 180-190520-E-1-C MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455977 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	ND	F1 F2 *+	100	228	F1 F2	ug/L		228	75 - 125	25	20

Lab Sample ID: 180-190520-D-11-B DU — **Client Sample ID: FIELD BLANK**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 455552 — **Prep Batch: 455101**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		1.04	J	ug/L		NC	20
Arsenic	ND		ND		ug/L		NC	20
Barium	0.010		9.78	F3	ug/L		200	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-190520-D-11-B DU
Matrix: Water
Analysis Batch: 455552

Client Sample ID: FIELD BLANK
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	ND		ND		ug/L		NC	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	ND		ND		ug/L		NC	20
Lead	ND		ND		ug/L		NC	20
Molybdenum	ND		ND		ug/L		NC	20
Selenium	ND		ND		ug/L		NC	20

Lab Sample ID: 180-190520-D-11-B DU
Matrix: Water
Analysis Batch: 455721

Client Sample ID: FIELD BLANK
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	ND		ND		ug/L		NC	20
Boron	ND		ND		ug/L		NC	20
Calcium	27000		27200		ug/L		1	20
Lithium	0.0053	J	5.51	J F3	ug/L		200	20

Lab Sample ID: 180-190520-D-11-B DU
Matrix: Water
Analysis Batch: 455977

Client Sample ID: 180-190520-D-11-B DU
Prep Type: Total/NA
Prep Batch: 455101

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Thallium	ND	*+	ND	*+	ug/L		NC	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-455116/1-A
Matrix: Water
Analysis Batch: 455352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00011	mg/L		05/20/25 13:19	05/21/25 10:24	1

Lab Sample ID: LCS 310-455116/2-A
Matrix: Water
Analysis Batch: 455352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.00169		mg/L		101	80 - 120

Lab Sample ID: 310-306326-A-1-C MS
Matrix: Water
Analysis Batch: 455352

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 455116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00013	J	0.00167	0.00189		mg/L		106	80 - 120

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 310-306326-A-1-D MSD
Matrix: Water
Analysis Batch: 455352

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 455116

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00013	J	0.00167	0.00189		mg/L		106	80 - 120	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-496199/1
Matrix: Water
Analysis Batch: 496199

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			05/19/25 17:19	1

Lab Sample ID: LCS 180-496199/2
Matrix: Water
Analysis Batch: 496199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	420	390		mg/L		93	85 - 115

Lab Sample ID: 180-190599-C-3 DU
Matrix: Water
Analysis Batch: 496199

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	880		867		mg/L		1	10

Lab Sample ID: 180-190599-C-7 DU
Matrix: Water
Analysis Batch: 496199

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1800		1820		mg/L		2	10

Lab Sample ID: MB 180-496284/1
Matrix: Water
Analysis Batch: 496284

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			05/20/25 16:38	1

Lab Sample ID: LCS 180-496284/2
Matrix: Water
Analysis Batch: 496284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	420	402		mg/L		96	85 - 115

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 180-190520-6 DU
Matrix: Water
Analysis Batch: 496284

Client Sample ID: MW-5AR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	980		881		mg/L		10	10

Lab Sample ID: MB 180-496285/1
Matrix: Water
Analysis Batch: 496285

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			05/20/25 16:41	1

Lab Sample ID: LCS 180-496285/2
Matrix: Water
Analysis Batch: 496285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	420	356		mg/L		85	85 - 115

Lab Sample ID: 180-190552-B-1 DU
Matrix: Water
Analysis Batch: 496285

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	240		250		mg/L		3	10

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-719399/1-A
Matrix: Water
Analysis Batch: 723115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 719399

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1684	U	0.175	0.175	1.00	0.274	pCi/L	05/27/25 08:31	06/18/25 21:30	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*30 - 110*	*05/27/25 08:31*	*06/18/25 21:30*	*1*

Lab Sample ID: LCS 160-719399/2-A
Matrix: Water
Analysis Batch: 723115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 719399

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.478		1.13	1.00	0.259	pCi/L	89	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.0*		*30 - 110*

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 180-190520-G-7-A DU
Matrix: Water
Analysis Batch: 723115

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 719399

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	1.25			0.8967		0.359	1.00	0.365	pCi/L			0.48	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*69.7*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-719400/1-A
Matrix: Water
Analysis Batch: 723120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 719400

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6934		0.392	0.397	1.00	0.564	pCi/L	05/27/25 08:37	06/18/25 11:39	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*30 - 110*	*05/27/25 08:37*	*06/18/25 11:39*	*1*
Y Carrier	*81.9*		*30 - 110*	*05/27/25 08:37*	*06/18/25 11:39*	*1*

Lab Sample ID: LCS 160-719400/2-A
Matrix: Water
Analysis Batch: 723120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 719400

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.34	8.937		1.29	1.00	0.593	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.0*		*30 - 110*
Y Carrier	*77.8*		*30 - 110*

Lab Sample ID: 180-190520-G-7-B DU
Matrix: Water
Analysis Batch: 723121

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 719400

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.81			3.003		0.792	1.00	0.780	pCi/L			0.87	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*69.7*		*30 - 110*
Y Carrier	*77.4*		*30 - 110*

HPLC/IC

Analysis Batch: 496509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-1	MW-2	Total/NA	Water	EPA 9056A	
180-190520-3	MW-4	Total/NA	Water	EPA 9056A	
180-190520-4	MW-5	Total/NA	Water	EPA 9056A	
180-190520-4	MW-5	Total/NA	Water	EPA 9056A	
180-190520-5	MW-5A	Total/NA	Water	EPA 9056A	
180-190520-6	MW-5AR	Total/NA	Water	EPA 9056A	
180-190520-6	MW-5AR	Total/NA	Water	EPA 9056A	
180-190520-7	MW-6	Total/NA	Water	EPA 9056A	
180-190520-8	MW-6A	Total/NA	Water	EPA 9056A	
180-190520-9	MW-7	Total/NA	Water	EPA 9056A	
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 9056A	
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 9056A	
180-190520-11	FIELD BLANK	Total/NA	Water	EPA 9056A	
MB 180-496509/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-496509/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-190515-D-9 MS	Matrix Spike	Total/NA	Water	EPA 9056A	
180-190515-D-9 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 9056A	

Analysis Batch: 496625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-2	MW-3	Total/NA	Water	EPA 9056A	
180-190520-2	MW-3	Total/NA	Water	EPA 9056A	
180-190520-3	MW-4	Total/NA	Water	EPA 9056A	
180-190520-5	MW-5A	Total/NA	Water	EPA 9056A	
180-190520-7	MW-6	Total/NA	Water	EPA 9056A	
180-190520-8	MW-6A	Total/NA	Water	EPA 9056A	
180-190520-9	MW-7	Total/NA	Water	EPA 9056A	
MB 180-496625/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-496625/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-190599-D-1 MS	Matrix Spike	Total/NA	Water	EPA 9056A	
180-190599-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 455101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-1	MW-2	Total/NA	Water	3005A	
180-190520-2	MW-3	Total/NA	Water	3005A	
180-190520-3	MW-4	Total/NA	Water	3005A	
180-190520-4	MW-5	Total/NA	Water	3005A	
180-190520-5	MW-5A	Total/NA	Water	3005A	
180-190520-6	MW-5AR	Total/NA	Water	3005A	
180-190520-7	MW-6	Total/NA	Water	3005A	
180-190520-8	MW-6A	Total/NA	Water	3005A	
180-190520-9	MW-7	Total/NA	Water	3005A	
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	3005A	
180-190520-11	FIELD BLANK	Total/NA	Water	3005A	
MB 310-455101/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-455101/2-A	Lab Control Sample	Total/NA	Water	3005A	
180-190520-E-1-B MS	180-190520-E-1-B MS	Total/NA	Water	3005A	
180-190520-E-1-B MS	MW-2	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 455101 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-E-1-C MSD	180-190520-E-1-C MSD	Total/NA	Water	3005A	
180-190520-E-1-C MSD	MW-2	Total/NA	Water	3005A	
180-190520-D-11-B DU	180-190520-D-11-B DU	Total/NA	Water	3005A	
180-190520-D-11-B DU	FIELD BLANK	Total/NA	Water	3005A	

Prep Batch: 455116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	7470A	
MB 310-455116/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-455116/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-306326-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	
310-306326-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 455352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	EPA 7470A	455116
MB 310-455116/1-A	Method Blank	Total/NA	Water	EPA 7470A	455116
LCS 310-455116/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	455116
310-306326-A-1-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	455116
310-306326-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	455116

Analysis Batch: 455552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	EPA 6020B	455101
MB 310-455101/1-A	Method Blank	Total/NA	Water	EPA 6020B	455101
LCS 310-455101/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-B MS	MW-2	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-C MSD	MW-2	Total/NA	Water	EPA 6020B	455101
180-190520-D-11-B DU	FIELD BLANK	Total/NA	Water	EPA 6020B	455101

Analysis Batch: 455721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-1	MW-2	Total/NA	Water	EPA 6020B	455101
180-190520-2	MW-3	Total/NA	Water	EPA 6020B	455101
180-190520-3	MW-4	Total/NA	Water	EPA 6020B	455101
180-190520-4	MW-5	Total/NA	Water	EPA 6020B	455101
180-190520-5	MW-5A	Total/NA	Water	EPA 6020B	455101
180-190520-6	MW-5AR	Total/NA	Water	EPA 6020B	455101
180-190520-7	MW-6	Total/NA	Water	EPA 6020B	455101
180-190520-8	MW-6A	Total/NA	Water	EPA 6020B	455101
180-190520-9	MW-7	Total/NA	Water	EPA 6020B	455101
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 6020B	455101
180-190520-11	FIELD BLANK	Total/NA	Water	EPA 6020B	455101
MB 310-455101/1-A	Method Blank	Total/NA	Water	EPA 6020B	455101
LCS 310-455101/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-B MS	MW-2	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-C MSD	MW-2	Total/NA	Water	EPA 6020B	455101
180-190520-D-11-B DU	FIELD BLANK	Total/NA	Water	EPA 6020B	455101

Metals

Analysis Batch: 455977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	EPA 6020B	455101
MB 310-455101/1-A	Method Blank	Total/NA	Water	EPA 6020B	455101
LCS 310-455101/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-B MS	180-190520-E-1-B MS	Total/NA	Water	EPA 6020B	455101
180-190520-E-1-C MSD	180-190520-E-1-C MSD	Total/NA	Water	EPA 6020B	455101
180-190520-D-11-B DU	180-190520-D-11-B DU	Total/NA	Water	EPA 6020B	455101

General Chemistry

Analysis Batch: 496199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-1	MW-2	Total/NA	Water	SM 2540C	
180-190520-2	MW-3	Total/NA	Water	SM 2540C	
180-190520-3	MW-4	Total/NA	Water	SM 2540C	
180-190520-4	MW-5	Total/NA	Water	SM 2540C	
180-190520-5	MW-5A	Total/NA	Water	SM 2540C	
180-190520-9	MW-7	Total/NA	Water	SM 2540C	
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	SM 2540C	
MB 180-496199/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-496199/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-190599-C-3 DU	Duplicate	Total/NA	Water	SM 2540C	
180-190599-C-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 496284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	SM 2540C	
180-190520-7	MW-6	Total/NA	Water	SM 2540C	
180-190520-8	MW-6A	Total/NA	Water	SM 2540C	
MB 180-496284/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-496284/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-190520-6 DU	MW-5AR	Total/NA	Water	SM 2540C	

Analysis Batch: 496285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-11	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 180-496285/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-496285/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-190552-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 719399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	PrecSep-21	
MB 160-719399/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-719399/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
180-190520-G-7-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 719400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-6	MW-5AR	Total/NA	Water	PrecSep_0	
MB 160-719400/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 719400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-719400/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
180-190520-G-7-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 496071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190520-1	MW-2	Total/NA	Water	Field Sampling	
180-190520-2	MW-3	Total/NA	Water	Field Sampling	
180-190520-3	MW-4	Total/NA	Water	Field Sampling	
180-190520-4	MW-5	Total/NA	Water	Field Sampling	
180-190520-5	MW-5A	Total/NA	Water	Field Sampling	
180-190520-6	MW-5AR	Total/NA	Water	Field Sampling	
180-190520-7	MW-6	Total/NA	Water	Field Sampling	
180-190520-8	MW-6A	Total/NA	Water	Field Sampling	
180-190520-9	MW-7	Total/NA	Water	Field Sampling	
180-190520-10	DUPLICATE (AT MW-5)	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Phone (412) 963-2468

Chain of Custody Record


180-190520 Chain of Custody

eurofins | Environment Testing

Client Information	Sampler: Rick Elgin	Lab PM: Johnson, Andy	COC No: 180-91658-16873.1
Client Contact: Anika Careaga	Phone: 573-636-9454	E-Mail: Andy.Johnson@et.eu	Page: Page 1 of 1
Company: Midwest Environmental Consultants	PWSID:		Job #:
Address: 2009 East McCarty Street Suite 2	Due Date Requested:		
City: Jefferson City	TAT Requested (days):		
State, Zip: MO, 65101	Compliance Project: Δ Yes Δ No		
Phone: 573-636-9454(Tel)	PO #: Purchase Order not required		
Email: acareaga@mecpc.com	WO #:		
Project Name: Asbury Pond - CCR	Project #: 18023389		
Site	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056A_ORGFM_28D - (MOD)Chloride, Fluoride & Sulfate	6020 - Boron/Calcium	2540C_Calcd - (MOD) TDS	6020/7470 - CCR Appiii/iv metals (sample MW-5AR)	9315_Ra226 - Standard Target List (sample MW-5AR)	9320_Ra228 - Standard Target List (sample MW-5AR)	6020_CCR Apeendex IV metals - sample MW5AR only)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	D	D	D	D		
MW-2	5-13-25	1:20	G	W			X	X	X						pH = 5.67 Spec Cond = 0.691
MW-3	5-14-25	11:30	G	W			X	X	X						pH = 5.83 Spec Cond = 1.258
MW-4	5-13-25	2:05	G	W			X	X	X						pH = 6.47 Spec Cond = 1.189
MW-5	5-13-25	2:45	G	W			X	X	X						pH = 7.28 Spec Cond = .936
MW-5A	5-14-25	9:15	G	W			X	X	X						pH = 6.77 Spec Cond = 3.983
MW-5AR	5-14-25	8:35	G	W			X		X	X	X	X	x		pH = 7.20 Spec Cond = 1.403
MW-6	5-14-25	9:55	G	W			X	X	X						pH = 7.06 Spec Cond = 2.376
MW-6A	5-14-25	10:30	G	W			X	X	X						pH = 6.65 Spec Cond = 2.528
MW-7	5-13-25	3:45	G	W			X	X	X						pH = 6.30 Spec Cond = 2.926
Duplicate (at MW-5)	5-13-25	3:00	G	W			X	X	X						pH = 7.28 Spec Cond = .936
Field Blank	5-14-25	11:40	G	W			X	X	X						pH = — Spec Cond = —

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Ryan Ortbals	5-14-25 / 3:00	MEC	FedEX	5-14-25 / 3:00	FedEX
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				5/15/25 900	EPIMB
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

Ver: 01/16/2019

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

SHIP
ACTW
CAD:

TO SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO. TESTING
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN

RMA:

FedEx

TRK# 0221 4359 6081 9819

THU - 15

PRIORITY O

XS AGCA

PA

Uncorrected temp 4.3 °C
Thermometer ID 26

CF <0.9 Initials JS

PT-WI-SR-001 effective 7/26/13

58GJ4/EA36/59F2

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

SHIP DATE: 18APR25
ACTWGT: 30.00 LB MAN
CAD: 0522321/CAFE3905

Part # 159469-634 RRD2 EX 04/26
8CC5/1184/FE2D

TO SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO. TESTING PITT N.E.
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN

RMA:

FedEx Express

J251024111401av

FedEx

TRK# 0221 4359 6081 9808

THU - 15 MAY AA
PRIORITY OVERNIGHT

XS AGCA

15238
PA-US
PIT

Uncorrected temp 5.6 °C
Thermometer ID 26

CF <0.9 Initials JS

PT-WI-SR-001 effective 7/26/13

58GJ4/EA36/59F2

180-190520 Waybill

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

SHIP DATE: 18APR25
ACTWGT: 30.00 LB
CAD: 0522321/CAFE3

TO SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO. TESTING PITT N.E.
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7630
REF: RETURN

RMA:

FedEx
TRK# 0221 4359 6081 9793

THU - 15 M
PRIORITY OVE

XS AGCA

Uncorrected temp 5.6 °C
Thermometer ID 26
CF -0.9 Initials TJ

4315344 14May2025 JLNA 581G4/EA36/5FE5

58GJ4/EA36/59F2

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

SHIP DATE: 18APR25
ACTWGT: 30.00 LB
CAD: 0522321/CAFE3

TO SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO. TESTING PITT N.E.
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7630
REF: RETURN

RMA:

FedEx
TRK# 0221 4359 6081 9782

THU - 15 MAY 10
PRIORITY OVERNI

XS AGCA

15
PA-US

Uncorrected temp 5.5 °C
Thermometer ID 26
CF -0.9 Initials TJ

58GJ4/EA36/59F2

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538896.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-190520-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/29/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-2 (180-190520-1)	5/13/25	01:20 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-3 (180-190520-2)	5/14/25	11:30 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-4 (180-190520-3)	5/13/25	02:05 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5 (180-190520-4)	5/13/25	02:45 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5A (180-190520-5)	5/14/25	09:15 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5AR (180-190520-6)	5/14/25	08:35 Central	G	Water			X	X	X	2	Historical Review required; Run once, upload twice
MW-6 (180-190520-7)	5/14/25	09:55 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-6A (180-190520-8)	5/14/25	10:30 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-7 (180-190520-9)	5/13/25	03:45 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/20/25 1700	DTMS	M. Pinette	MAY 2 2 2025 1445	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538896.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-190520-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND CCR	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228 (calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-5AR (180-190520-6)	5/14/25	08:35 Central	G	Water			X	X	X	2	Historical Review required; Run once, upload twice

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/20/25 1700	EPTNE	M. Pinette	MAY 2 2 2025 1445	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538896.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-190520-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/29/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND NPDES	Project #: 18023389			Other: N/A
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-190520-10)	5/13/25	03:00 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
FIELD BLANK (180-190520-11)	5/14/25	11:40 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/20/25 1700	Company EFPTNS	Received by: M. Pinette	Date/Time: MAY 2 2 2025 1445	Company
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

eurofins | Environment Testing America

180-190520 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client:			
City/State.	CITY	STATE	Project:
Receipt Information			
Date/Time Received.	DATE 5/17/25	TIME 930	Received By: KB

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers		
Sample(s) received in Cooler?	☒ Yes ☐ No	*If yes.* Cooler ID:
Multiple Coolers?	☐ Yes ☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present? No	☒ Yes ☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐
Sample Custody Seals Present? No	☐ Yes ☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐
Trip Blank Present?	☐ Yes ☒ No	*If yes.* Which VOA samples are in cooler? ↓

Temperature Record					
Coolant:	☒ Wet ice	☐ Blue ice	☐ Dry ice	☐ Other:_____	☐ NONE
Thermometer ID:	7		Correction Factor (°C):	0	

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C):	1.1	Corrected Temp (°C):	1.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
~~Uncorrected Temp~~ (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone. 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538767 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-190520-1
Address: 3019 Venture Way, ,	Due Date Requested: 5/29/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT (MOD) Metals by 6020B	7470A/7470A_Prep Mercury	6020B/3005A_TOT (MOD) *Custom Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-2 (180-190520-1)	5/13/25	01.20 Central	G	Water			X	X		2	run once - report twice
MW-3 (180-190520-2)	5/14/25	11 30 Central	G	Water			X	X		2	run once - report twice
MW-4 (180-190520-3)	5/13/25	02.05 Central	G	Water			X	X		2	run once - report twice
MW-5 (180-190520-4)	5/13/25	02.45 Central	G	Water			X	X		2	run once - report twice
MW-5A (180-190520-5)	5/14/25	09 15 Central	G	Water			X	X		2	run once - report twice
MW-5AR (180-190520-6)	5/14/25	08 35 Central	G	Water				X	X	2	run once - report twice
MW-6 (180-190520-7)	5/14/25	09 55 Central	G	Water			X	X		2	run once - report twice
MW-6A (180-190520-8)	5/14/25	10 30 Central	G	Water			X	X		2	run once - report twice
MW-7 (180-190520-9)	5/13/25	03 45 Central	G	Water			X	X		2	run once - report twice

Note: Since laboratory accreditations are subject to change Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/16/25 1700	BRTLAB			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/17/25 930	Company: ET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone. 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538767.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 2 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-190520-1
Address: 3019 Venture Way, ,	Due Date Requested: 5/29/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND NPDES	Project #: 18023089			Other: N/A
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT (MOD) Metals by 6020B	7470A/7470A_Prep Mercury	6020B/3005A_TOT (MOD) *Custom Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-190520-10)	5/13/25	03 00 Central	G	Water			X	X		1	run once - report twice
FIELD BLANK (180-190520-11)	5/14/25	11 40 Central	G	Water			X	X		2	run once - report twice

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/16/25 1700	Company ET-PHX	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: XB	Date/Time: 5/17/25 930	Company et

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

6/23/2025

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone. 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538767 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-190520-2
Address: 3019 Venture Way, ,	Due Date Requested: 5/29/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND CCR	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT (MOD) B/Ca by 6020B	6020B/3005A_TOT (MOD) Custom Metals List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
				Preservation Code:							
MW-2 (180-190520-1)	5/13/25	01.20 Central	G	Water			X			2	
MW-3 (180-190520-2)	5/14/25	11 30 Central	G	Water			X			2	
MW-4 (180-190520-3)	5/13/25	02.05 Central	G	Water			X			2	
MW-5 (180-190520-4)	5/13/25	02.45 Central	G	Water			X			2	
MW-5A (180-190520-5)	5/14/25	09:15 Central	G	Water			X			2	
MW-5AR (180-190520-6)	5/14/25	08 35 Central	G	Water				X	X	2	run once - report twice
MW-6 (180-190520-7)	5/14/25	09:55 Central	G	Water			X			2	
MW-6A (180-190520-8)	5/14/25	10:30 Central	G	Water			X			2	
MW-7 (180-190520-9)	5/13/25	03 45 Central	G	Water			X			2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed		*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months	
Deliverable Requested I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements.	
Empty Kit Relinquished by:	Date.	Time.	Method of Shipment:
Relinquished by: [signature]	Date/Time: 5/16/25 1700	Company: EB-ATIC	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature] / Date/Time: 5/17/25 930 / Company: [signature]
Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:	

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone. 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-538767.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 2 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-190520-2
Address: 3019 Venture Way, ,	Due Date Requested: 5/29/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ASBURY POND CCR	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT (MOD) B/Ca by 6020B	6020B/3005A_TOT (MOD) Custom Metals List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-190520-10)	5/13/25	03.00 Central	G	Water			X			1	
FIELD BLANK (180-190520-11)	5/14/25	11.40 Central	G	Water			X			2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/16/25 1700	ET+HC			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/17/25 430	Company ET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-190520-2

Login Number: 190520

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Ryan, Shannon G

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-190520-2

Login Number: 190520
List Number: 2
Creator: Bunker, Xavier M

List Source: Eurofins Cedar Falls
List Creation: 05/17/25 12:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-190520-2

Login Number: 190520
List Number: 4
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 05/22/25 03:40 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

APPENDIX 4

Statistical Analysis

JETT ENVIRONMENTAL CONSULTING

July 9, 2025 ***Submitted via Email***

Mr. Lindsey R. Henry, PE
Midwest Environmental Consultants
2009 E. McCarty St., Suite 2
Jefferson City, MO 65101

Re: Groundwater Statistical Analysis Results
Asbury Power Plant – Coal Combustion Residuals (CCR) Impoundment
United States Environmental Protection Agency Program

Dear Mr. Henry:

Jett Environmental Consulting is providing the results of the groundwater statistical analysis for the May 2025 event at the Asbury Power Plant – CCR Impoundment.

If you have any questions or comments, please contact me at steve.jett@jettenviro.com or 314-496-4654.

Sincerely,

Steve Jett, P.G.
Owner

Travis Doll
Senior Geologist

Attachments:
Table 1 – SSIs Observed During May 2025 Sampling Event
1 - Time Series Graphs – Inorganics
2 - Trend Testing – Inorganics
3 - Inter-Well Prediction Limits
4 - Statistical Power Curves

Inorganics – Times Series & Trend Testing

Time Series graphs were generated for each of the inorganic constituents. The time series graphs are included in **Attachment 1**.

The inorganic constituents with results above the laboratory reporting limits were analyzed with Sanitas™ to determine if statistically significant increasing or decreasing trends exist within the background data range (January 2016 through May 2023) utilizing the Sen's Slope / Mann-Kendall trend test. Trends were based on a 98% confidence level (two tailed). The following constituents exhibited statistically significant increasing trends: boron (MW-5A), calcium (MW-5A, MW-6A), chloride (MW-5, MW-5A, MW-6), sulfate (MW-5A, MW-6A), and total dissolved solids (MW-5A, MW-6A). Of the increasing trends, no instances were for an upgradient well. All other constituents were either not trending or had a statistically significant decreasing trend. The trending data have only been reviewed at this time. No trending data was removed before performing the inter-well prediction interval analysis. The trend testing results are included in **Attachment 2**.

Inorganics – Inter-Well Prediction Limits

Statistical Analysis was performed on the inorganic constituents and metals. Prediction interval analyses compare one or more observations to a limit set by background data. Background data consists of semi-annual groundwater tests from the upgradient wells (MW-2, MW-3, and MW-7) between January 2016 and May 2023 (20 events). Inter-well analyses compare observations from upgradient background wells and their relation to the observations for the downgradient wells. Intra-well analyses compare background observations to current observations of the same well.

Sanitas™ was used to perform the statistical analyses. For most constituents, non-parametric inter-well prediction intervals were performed due to non-detectable levels in more than 50 percent of the background samples or if data were not normally distributed. The Sanitas™ inter-well prediction limit outputs are included in **Attachment 3**.

Table 1 lists the parameters that exhibited a statistically significant increase (SSI) during the May 2025 sampling event, the associated monitoring wells, inter-well prediction limit, and the measured concentration. Also included on the table is a comparison to any established USEPA National Primary Drinking Water Standard - Maximum Contaminant Level (MCL).

Statistical Power Curves

A statistical power curve graph has been prepared to allow comparisons between the current monitoring program and USEPA-recommended standards. Under the USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (March 2009), inter-well prediction limits are constructed to have a site-wide false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. **Attachment 4** presents the power curves for the facility's monitoring program.

Results Summary

Boron (MW-5A), pH (MW-5 and MW-6), and total dissolved solids (MW-5A) exhibited confirmed SSIs during the May 2025 event.

Total dissolved solids (MW-6) exhibited an initial SSI during the May 2025 event.

Of the SSIs, none have an established MCL.

Table 1
SSIs Observed During May 2025 Sampling Event

Constituent (units)	Well	Initial vs. Confirmed	Statistical Limit	Result	MCL
Boron (mg/L)	MW-5A	Confirmed	0.9	1.9	NE
pH (SU)	MW-5	Confirmed	5.22 - 6.98	7.28	NE
pH (SU)	MW-6	Confirmed	5.22 - 6.98	7.06	NE
Total Dissolved Solids (mg/L)	MW-5A	Confirmed	3100	3200	NE
Total Dissolved Solids (mg/L)	MW-6	Initial	3100	7700	NE

NE = Not Established.

MCL = USEPA National Primary Drinking Water Standard - Maximum Contaminant Level

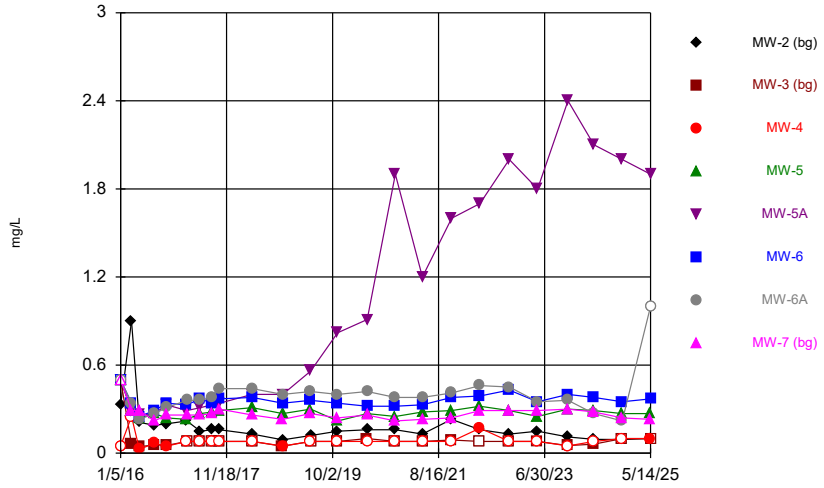
ATTACHMENTS

ATTACHMENT 1

TIME SERIES GRAPHS
INORGANICS

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

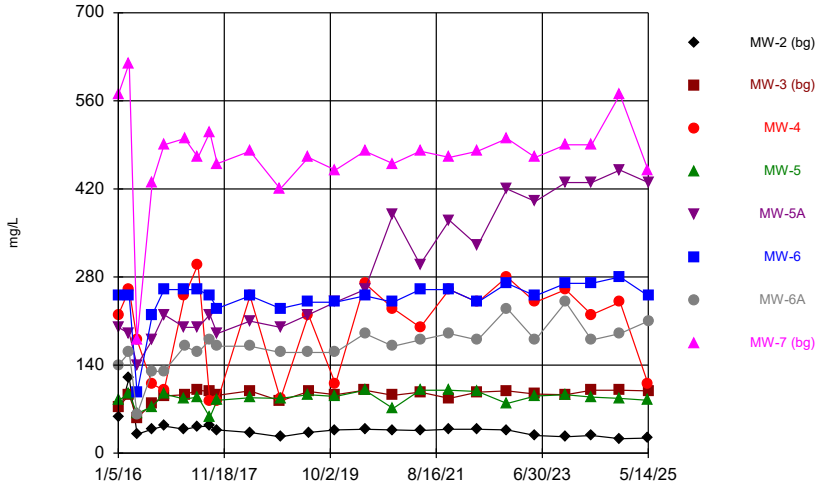
Boron



Time Series Analysis Run 7/8/2025 9:53 AM
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

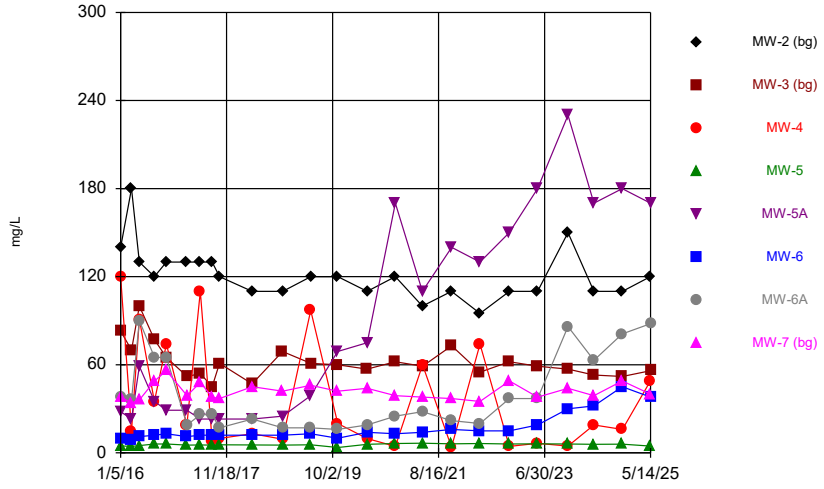
Calcium



Time Series Analysis Run 7/8/2025 9:53 AM
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

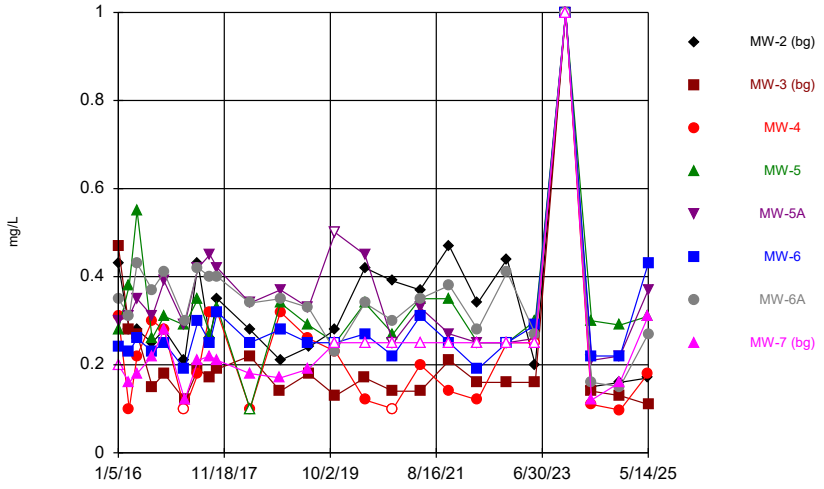
Chloride



Time Series Analysis Run 7/8/2025 9:53 AM
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

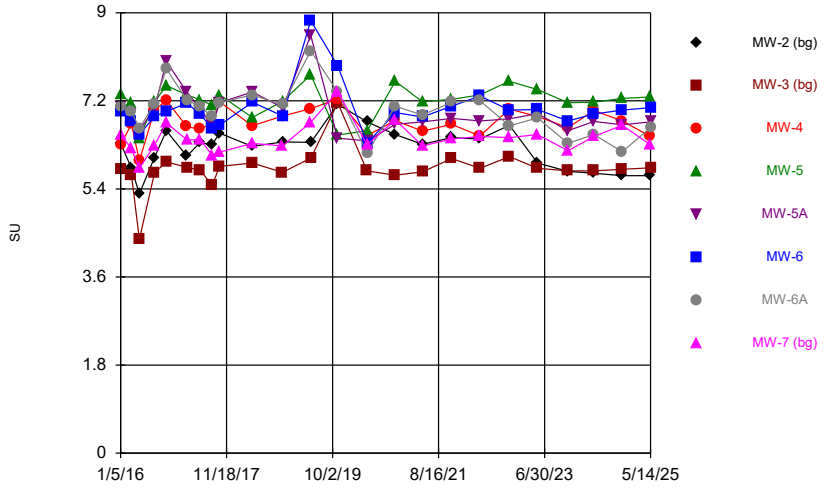
Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Fluoride



Time Series Analysis Run 7/8/2025 9:53 AM
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH

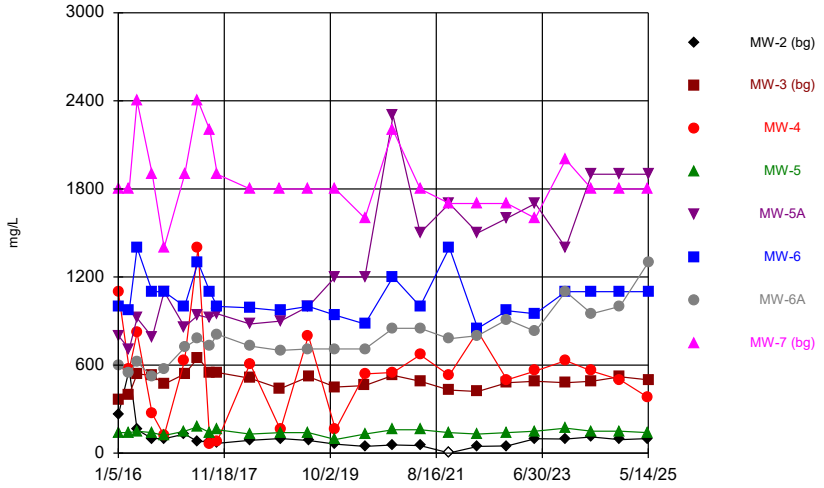


Time Series Analysis Run 7/8/2025 9:53 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

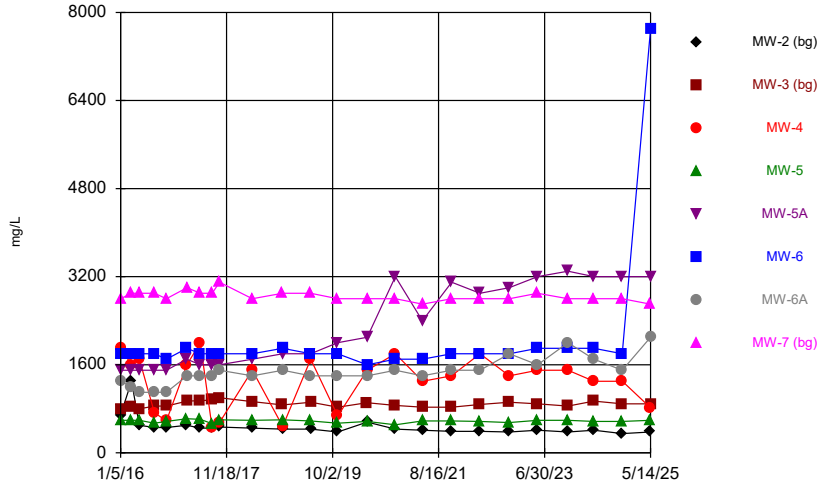
Sulfate



Time Series Analysis Run 7/8/2025 9:53 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids



Time Series Analysis Run 7/8/2025 9:53 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

ATTACHMENT 2

TREND TESTING
INORGANICS

Trend Test

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 7/8/2025, 9:58 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-2 (bg)**	**-0.01157**	**-74**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Boron (mg/L)	MW-3 (bg)	1.4e-10	44	73	No	20	60	n/a	n/a	0.02	NP
Boron (mg/L)	MW-4	0	52	73	No	20	75	n/a	n/a	0.02	NP
Boron (mg/L)	MW-5	0	13	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	**MW-5A**	**0.2069**	**149**	**73**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.02**	**NP**
Boron (mg/L)	MW-6	0.004198	36	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	MW-6A	0.014	59	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	MW-7 (bg)	0	-22	-73	No	20	5	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-2 (bg)	-1.025	-60	-73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-3 (bg)	1.323	60	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-4	5.128	33	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-5	1.7	51	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	**MW-5A**	**29.17**	**136**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	MW-6	0	30	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	**MW-6A**	**7.097**	**108**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	MW-7 (bg)	0	-12	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**MW-2 (bg)**	**-4.251**	**-121**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	MW-3 (bg)	-1.609	-43	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**MW-4**	**-3.614**	**-74**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-5**	**0.1787**	**93**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-5A**	**17.84**	**105**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-6**	**0.7246**	**126**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	MW-6A	-1.923	-41	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	MW-7 (bg)	-0.08072	-10	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-2 (bg)	0.008487	22	73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-3 (bg)	-0.006744	-61	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-4	-0.006169	-21	-73	No	20	20	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-5	-0.004548	-27	-73	No	20	5	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-5A	-0.007672	-37	-73	No	20	15	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-6	0.0007283	23	73	No	20	10	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-6A	-0.009747	-49	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	**MW-7 (bg)**	**0.008083**	**77**	**73**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.02**	**NP**
pH (SU)	MW-2 (bg)	0.05735	59	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-3 (bg)	0.02709	52	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-4	0.0217	19	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-5	0.02125	34	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-5A	-0.03798	-29	-73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-6	0.03219	46	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-6A	-0.008695	-9	-73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-7 (bg)	0.03464	52	73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-2 (bg)**	**-16.16**	**-122**	**-73**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-3 (bg)	-6.48	-24	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	MW-4	-6.658	-7	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	MW-5	0	-3	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-5A**	**127.3**	**132**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-6	-18.61	-57	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-6A**	**34.49**	**108**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-7 (bg)	-33.2	-70	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-2 (bg)**	**-16.07**	**-127**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-3 (bg)	5.317	19	73	No	20	0	n/a	n/a	0.02	NP

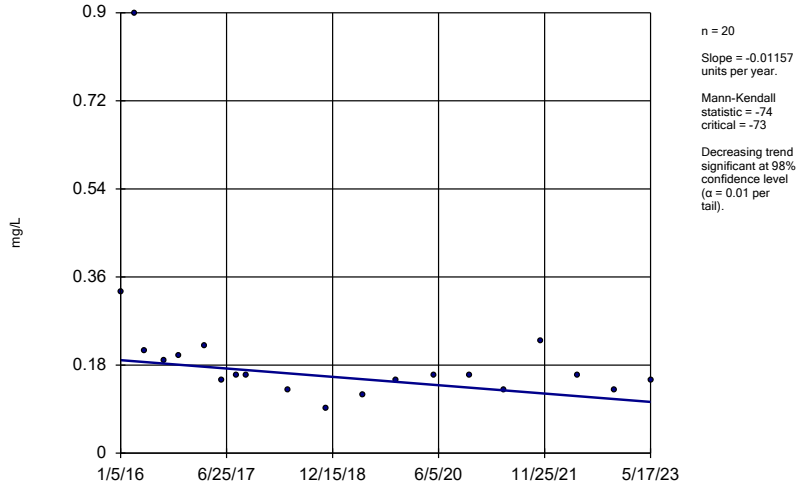
Trend Test

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 7/8/2025, 9:58 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	MW-4	-6.971	-7	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	MW-5	-3.205	-42	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-5A**	**195.1**	**156**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-6	0	-4	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-6A**	**50.05**	**113**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-7 (bg)	0	-48	-73	No	20	0	n/a	n/a	0.02	NP

Boron

MW-2 (bg)



n = 20

Slope = -0.01157 units per year.

Mann-Kendall statistic = -74
critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

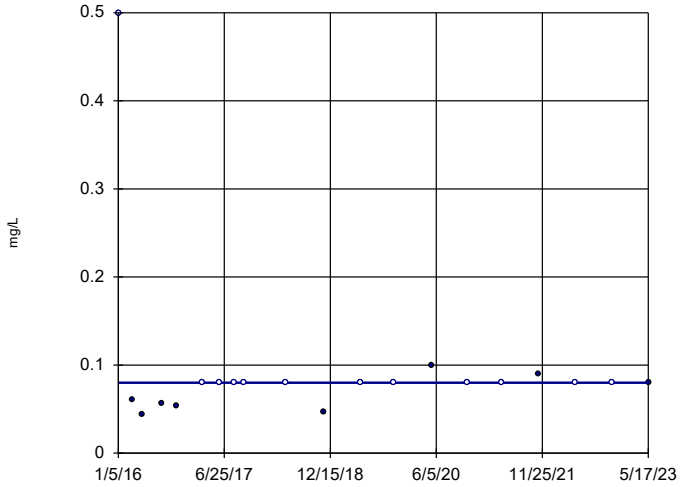
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Boron

MW-3 (bg)



n = 20

Slope = 1.4e-10 units per year.

Mann-Kendall statistic = 44
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

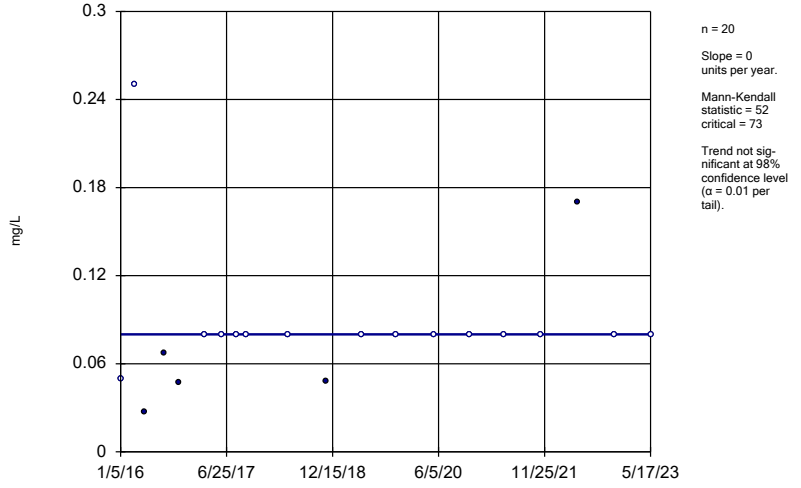
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Boron

MW-4



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 52
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

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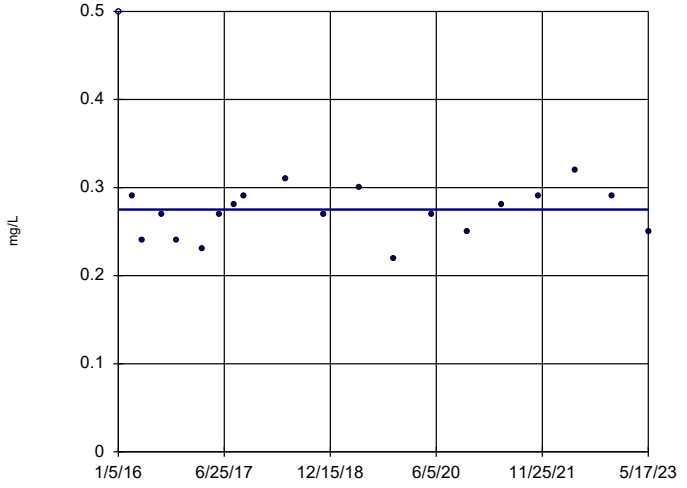
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Boron

MW-5



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 13
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

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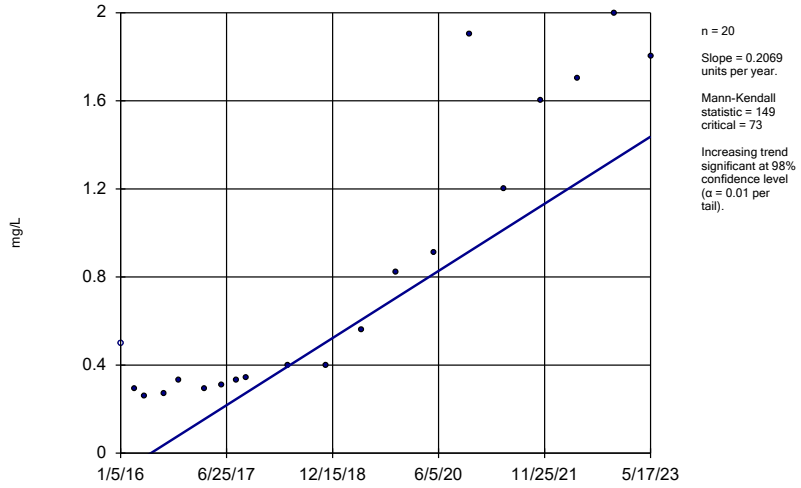
Boron

MW-5A



n = 20

Slope = 0.2069 units per year.

Mann-Kendall statistic = 149 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

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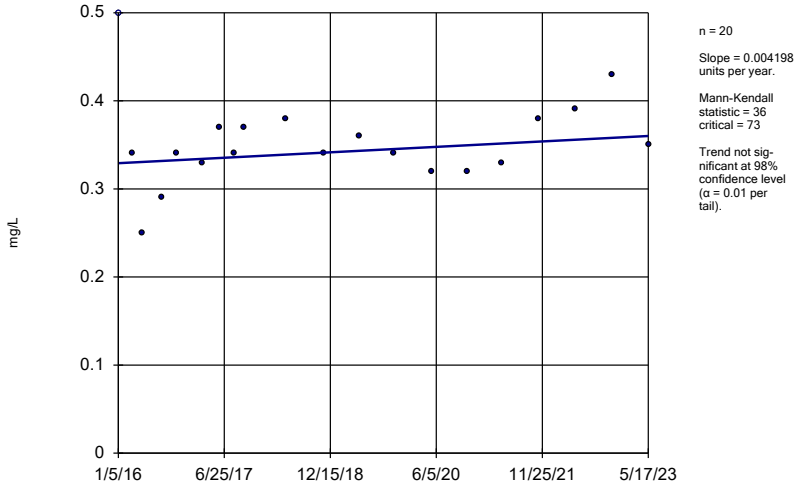
Boron

MW-6



n = 20

Slope = 0.004198 units per year.

Mann-Kendall statistic = 36 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

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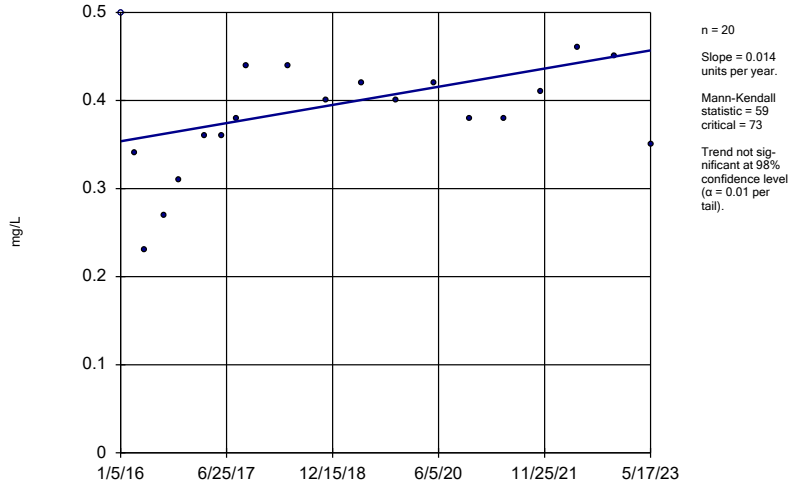
Boron

MW-6A



n = 20

Slope = 0.014 units per year.

Mann-Kendall statistic = 59 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

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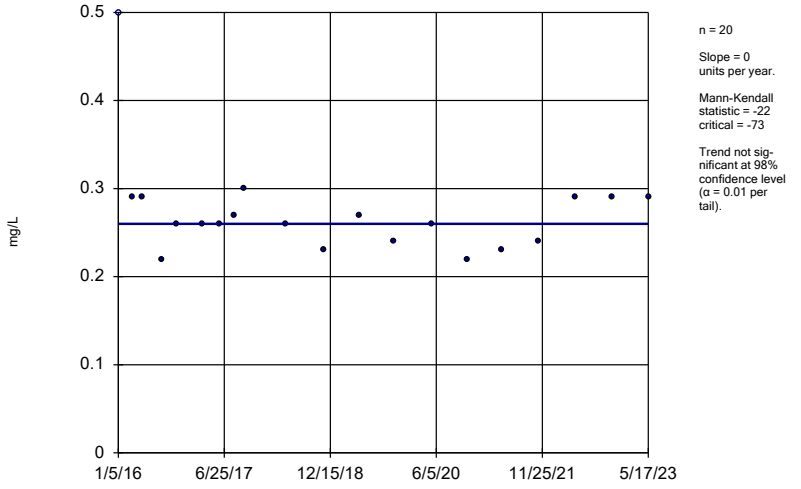
Boron

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -22 critical = -73

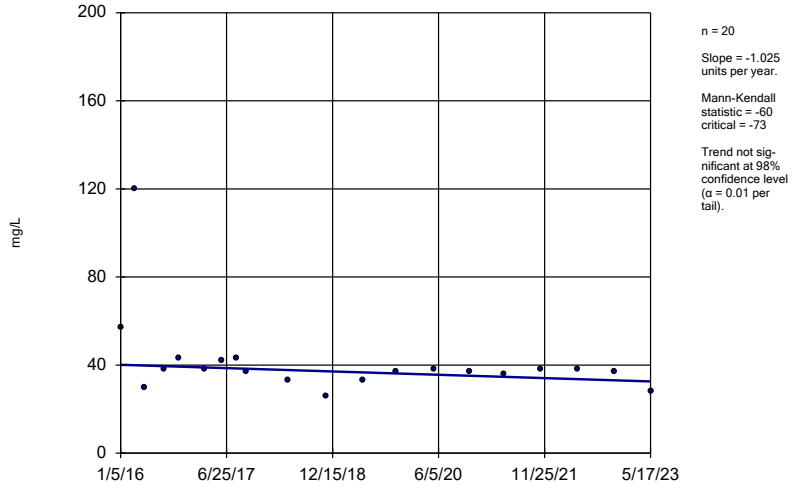
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Calcium

MW-2 (bg)



n = 20

Slope = -1.025 units per year.

Mann-Kendall statistic = -60 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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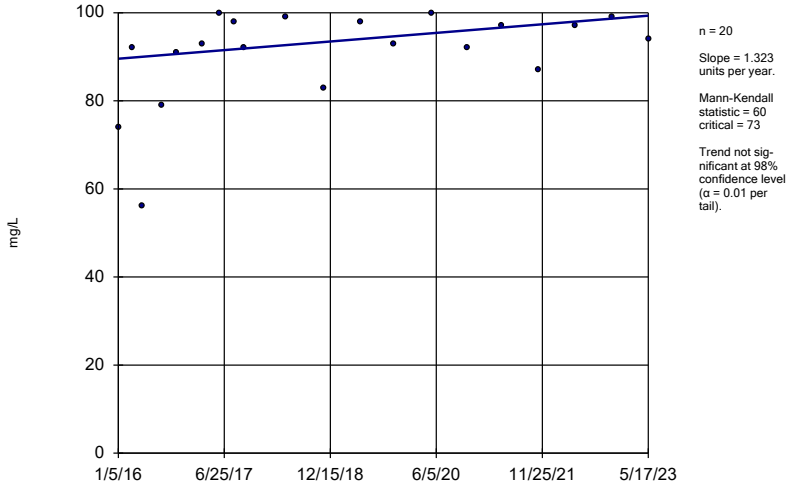
Calcium

MW-3 (bg)



n = 20

Slope = 1.323 units per year.

Mann-Kendall statistic = 60 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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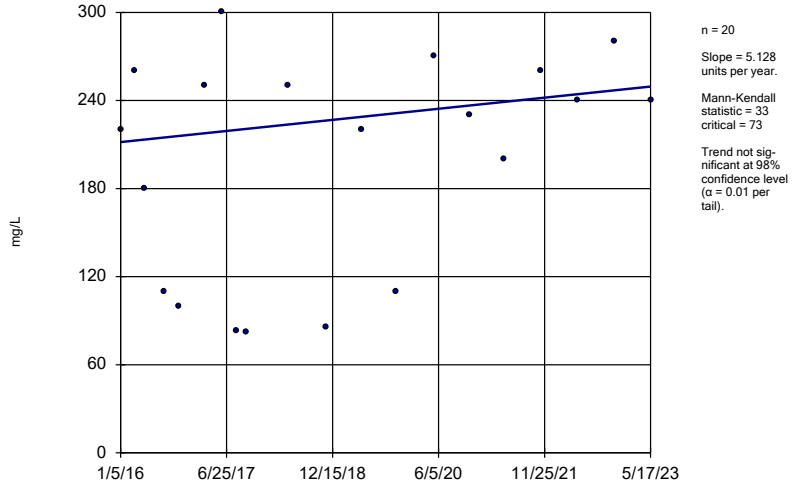
Calcium

MW-4



n = 20

Slope = 5.128 units per year.

Mann-Kendall statistic = 33 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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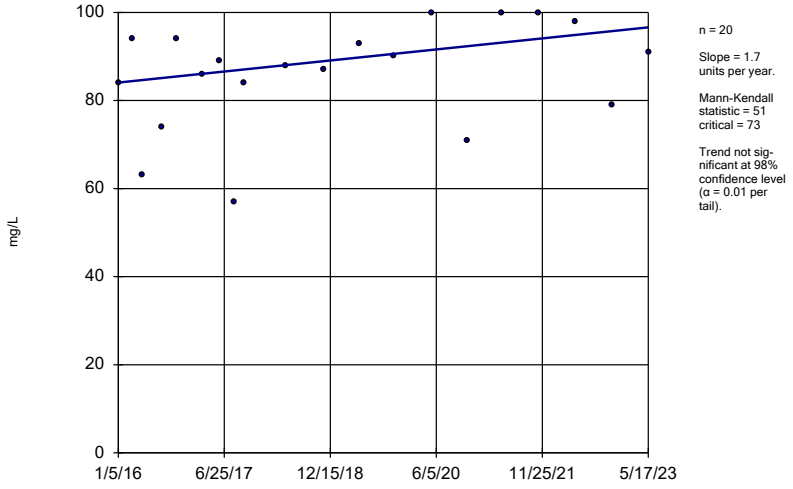
Calcium

MW-5



n = 20

Slope = 1.7 units per year.

Mann-Kendall statistic = 51 critical = 73

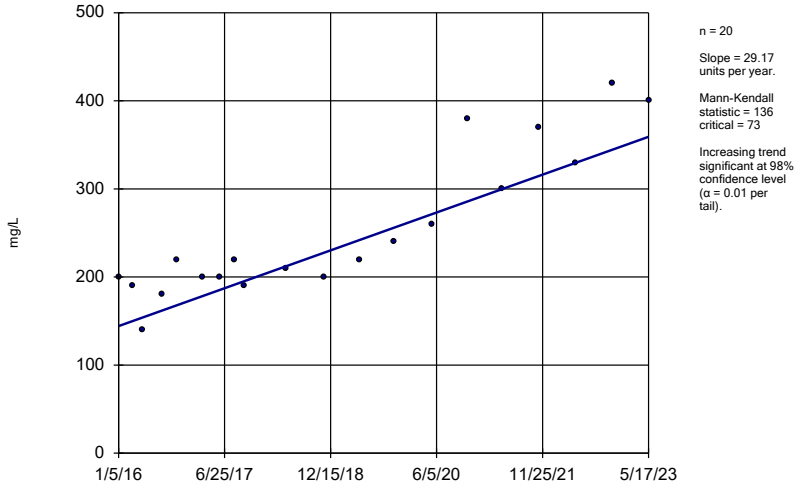
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Calcium

MW-5A



n = 20

Slope = 29.17 units per year.

Mann-Kendall statistic = 136 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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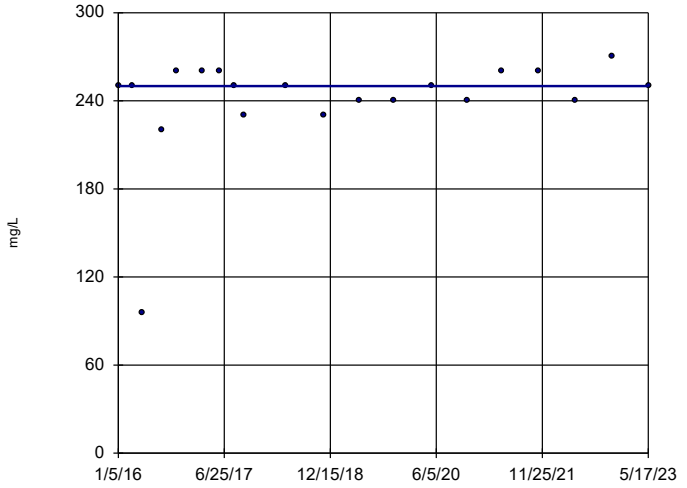
Calcium

MW-6



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 30 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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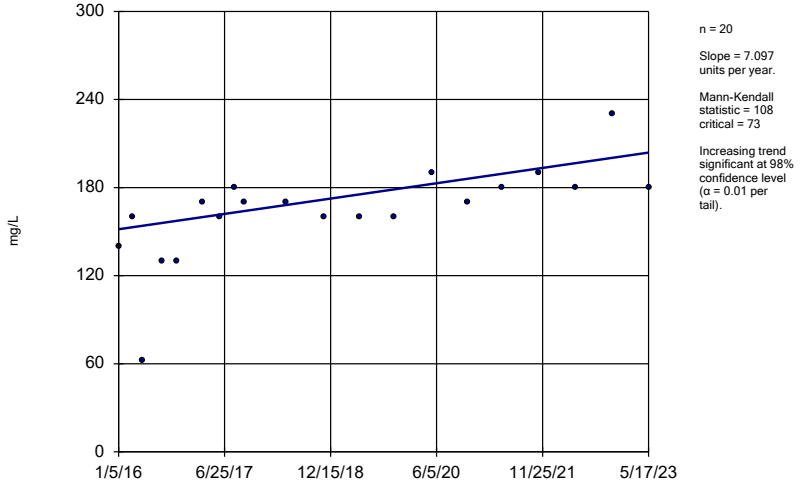
Calcium

MW-6A



n = 20

Slope = 7.097 units per year.

Mann-Kendall statistic = 108 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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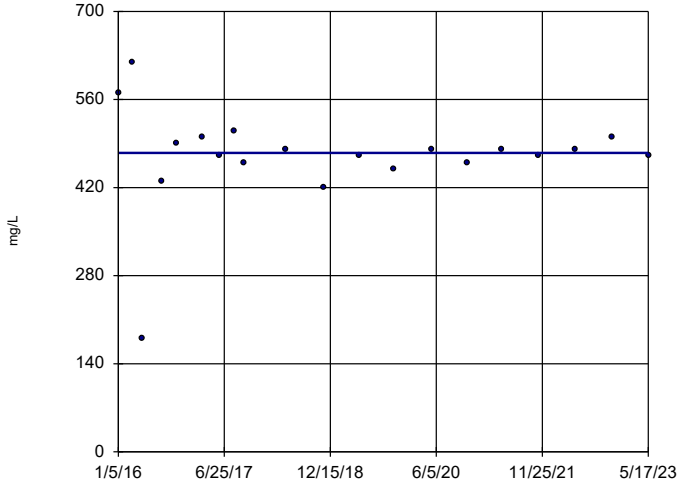
Calcium

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -12 critical = -73

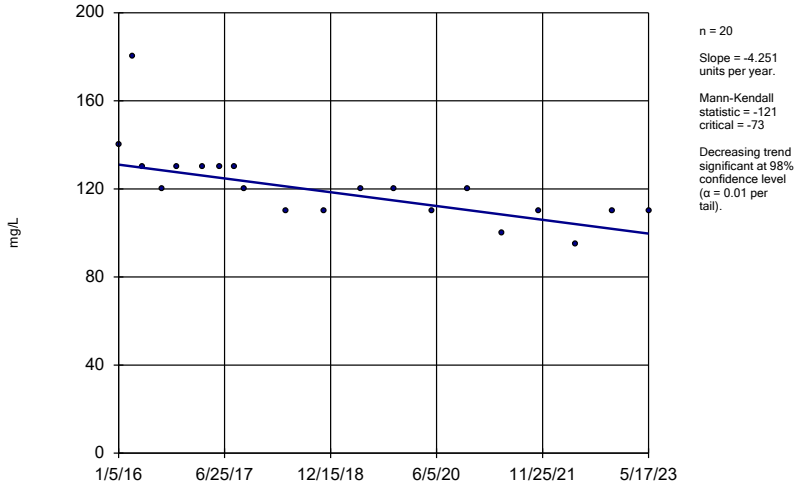
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Chloride

MW-2 (bg)



n = 20

Slope = -4.251 units per year.

Mann-Kendall statistic = -121 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

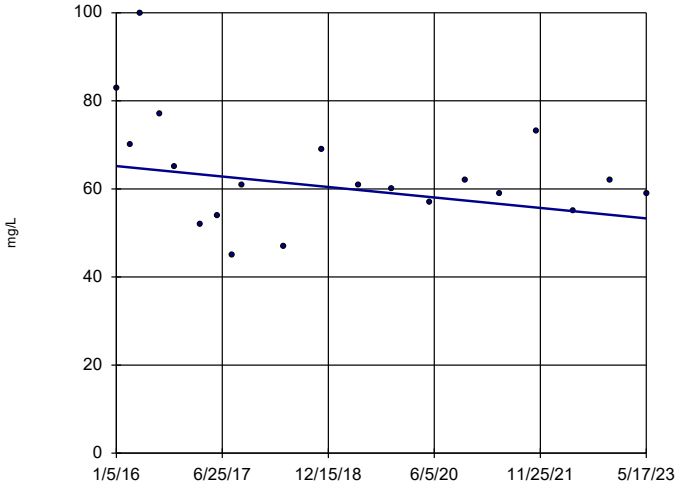
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Chloride

MW-3 (bg)



n = 20

Slope = -1.609 units per year.

Mann-Kendall statistic = -43 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

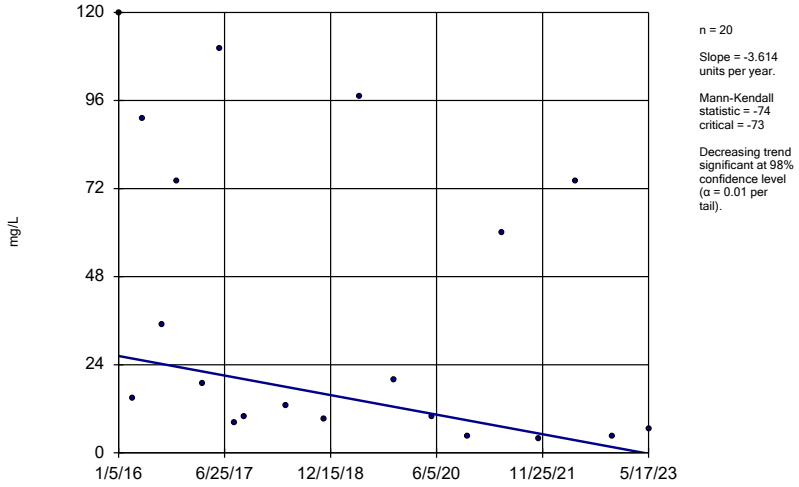
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Chloride

MW-4



n = 20

Slope = -3.614 units per year.

Mann-Kendall statistic = -74 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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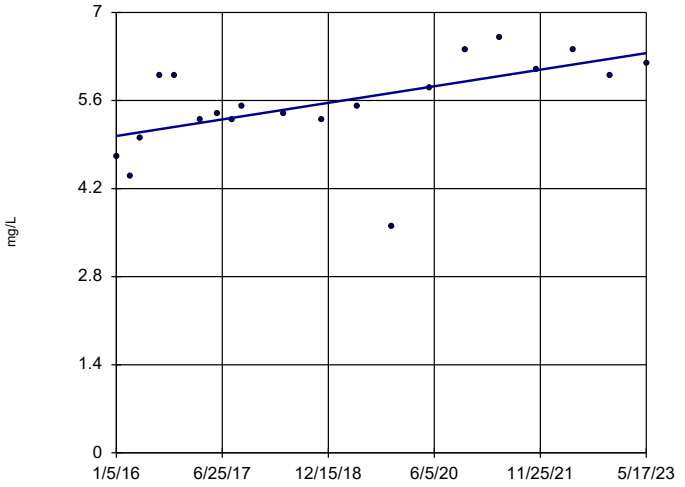
Chloride

MW-5



n = 20

Slope = 0.1787 units per year.

Mann-Kendall statistic = 93 critical = 73

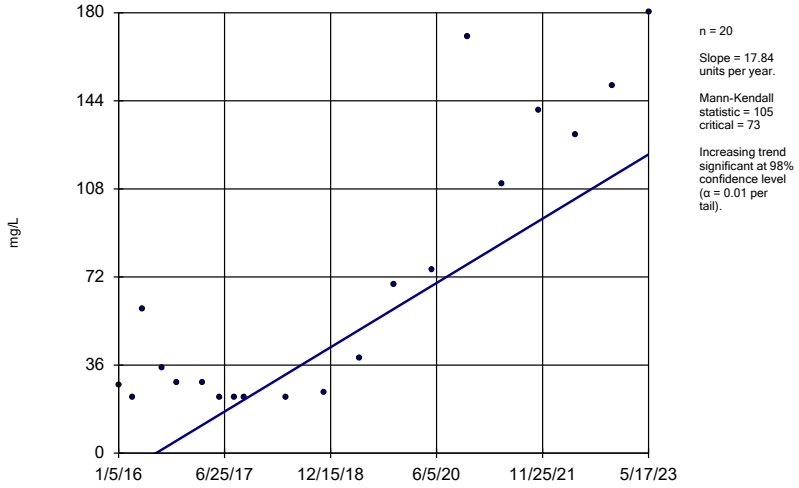
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Chloride

MW-5A



n = 20

Slope = 17.84 units per year.

Mann-Kendall statistic = 105 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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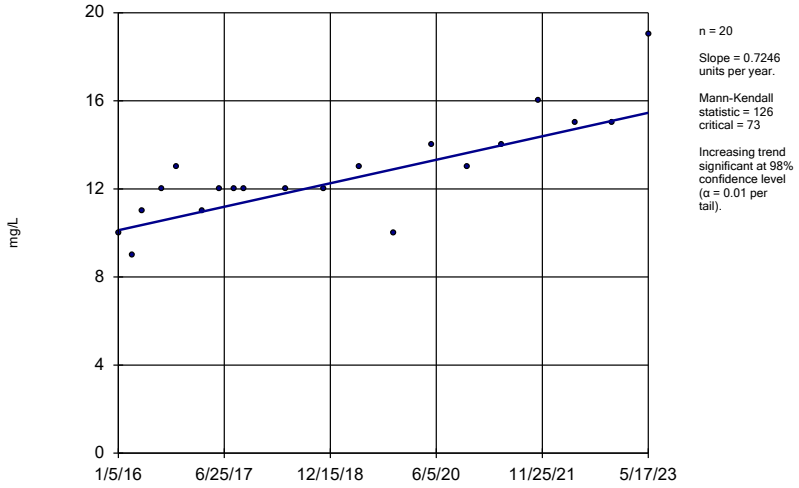
Chloride

MW-6



n = 20

Slope = 0.7246 units per year.

Mann-Kendall statistic = 126 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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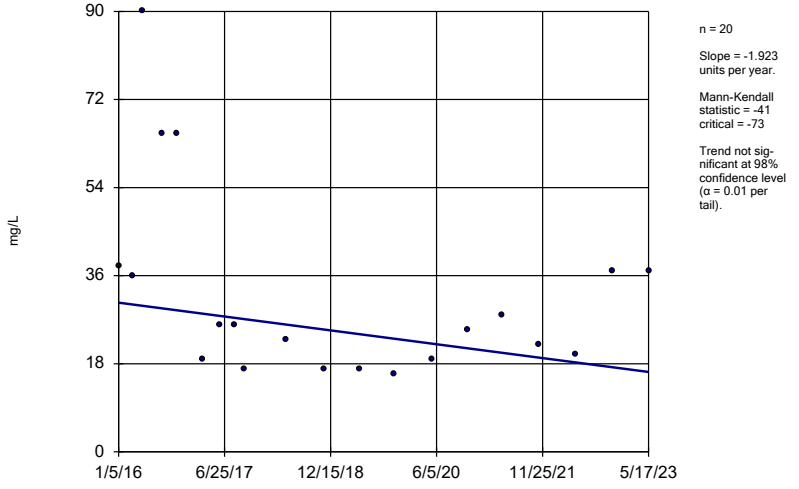
Chloride

MW-6A



n = 20

Slope = -1.923 units per year.

Mann-Kendall statistic = -41 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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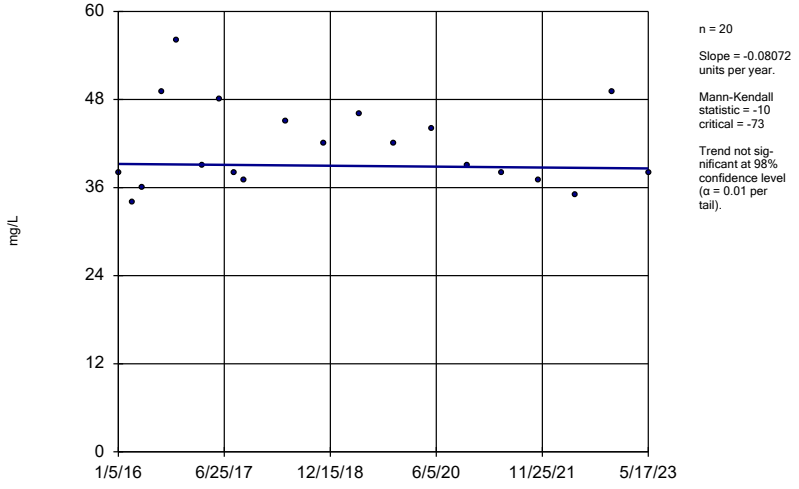
Chloride

MW-7 (bg)



n = 20

Slope = -0.08072 units per year.

Mann-Kendall statistic = -10 critical = -73

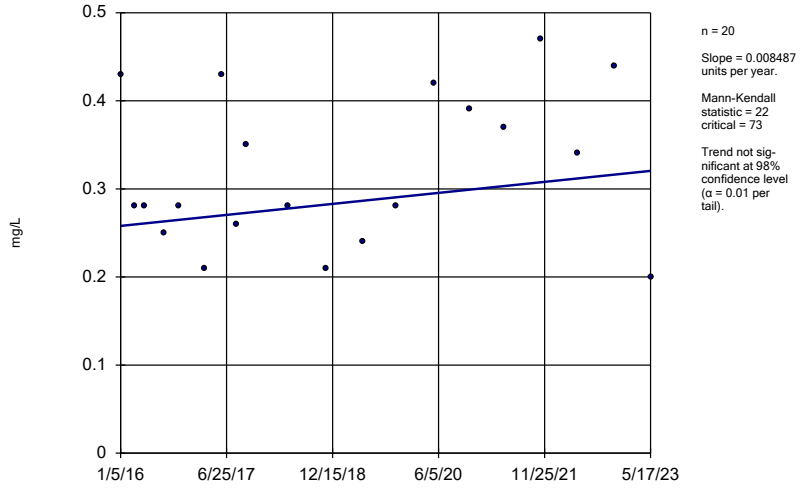
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Fluoride

MW-2 (bg)



n = 20

Slope = 0.008487 units per year.

Mann-Kendall statistic = 22 critical = 73

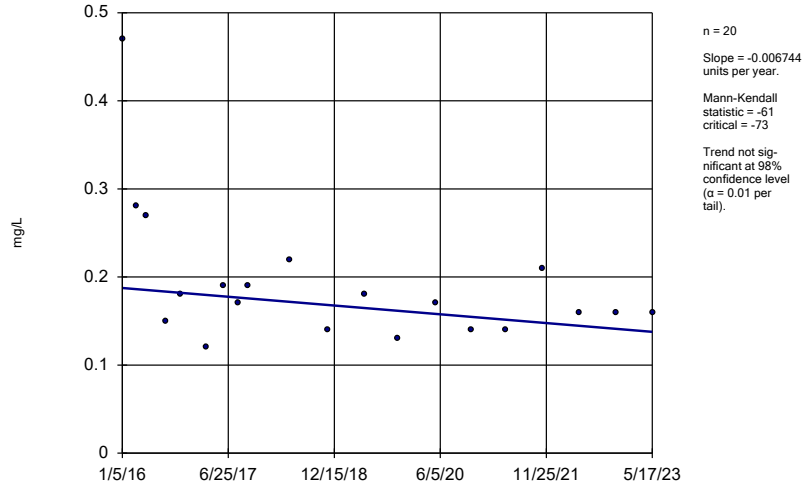
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Fluoride

MW-3 (bg)



n = 20

Slope = -0.006744 units per year.

Mann-Kendall statistic = -61 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

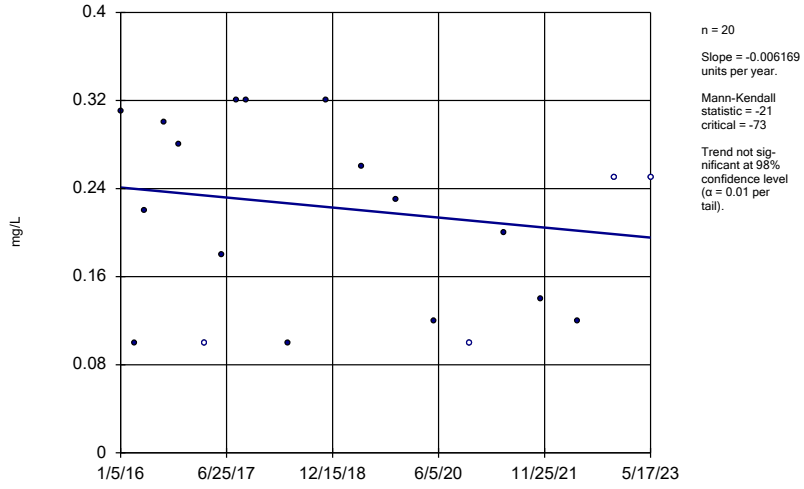
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Fluoride

MW-4



n = 20

Slope = -0.006169 units per year.

Mann-Kendall statistic = -21 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

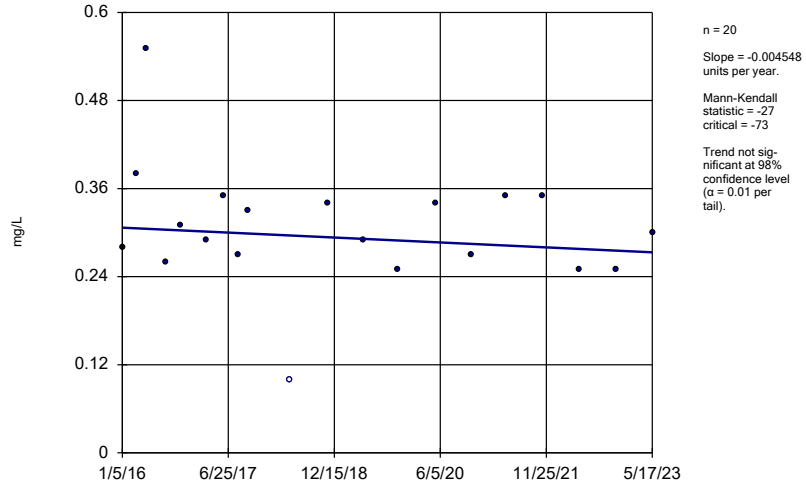
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Fluoride

MW-5



n = 20

Slope = -0.004548 units per year.

Mann-Kendall statistic = -27 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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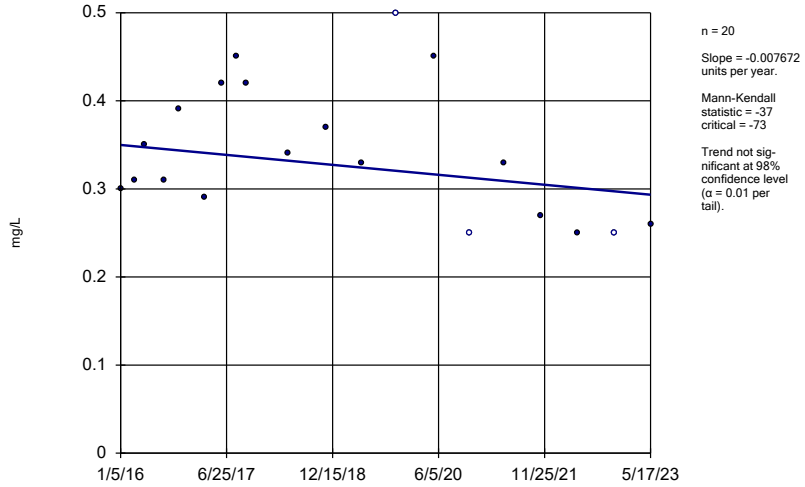
Hollow symbols indicate censored values.

Fluoride

MW-5A



n = 20

Slope = -0.007672 units per year.

Mann-Kendall statistic = -37
critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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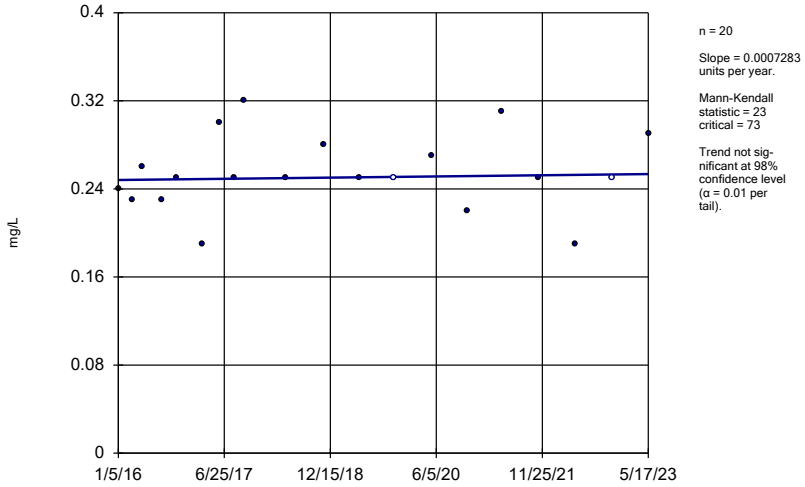
Hollow symbols indicate censored values.

Fluoride

MW-6



n = 20

Slope = 0.0007283 units per year.

Mann-Kendall statistic = 23
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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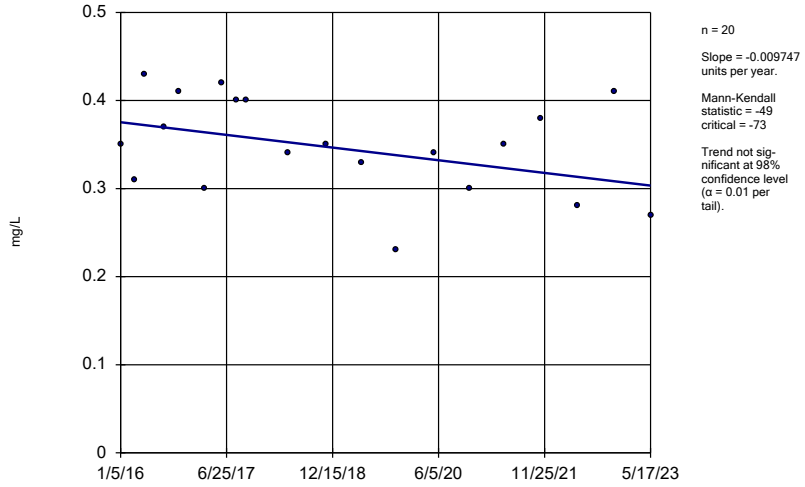
Fluoride

MW-6A



n = 20

Slope = -0.009747 units per year.

Mann-Kendall statistic = -49
critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

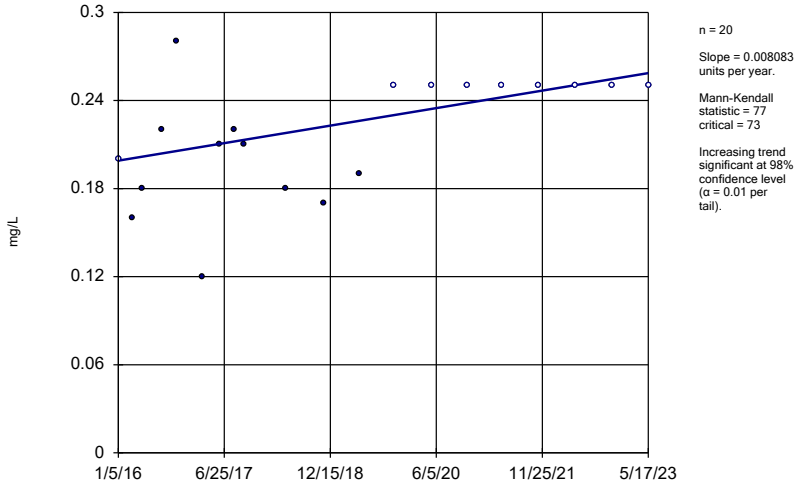
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Fluoride

MW-7 (bg)



n = 20

Slope = 0.008083 units per year.

Mann-Kendall statistic = 77
critical = 73

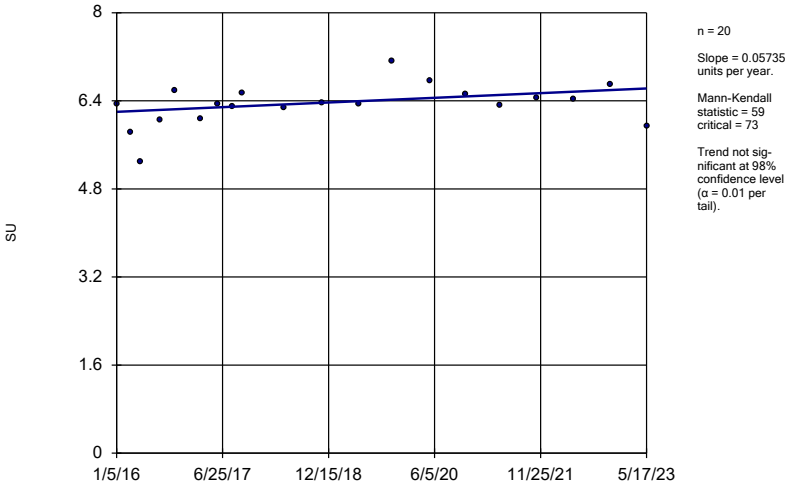
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH

MW-2 (bg)



n = 20

Slope = 0.05735 units per year.

Mann-Kendall statistic = 59 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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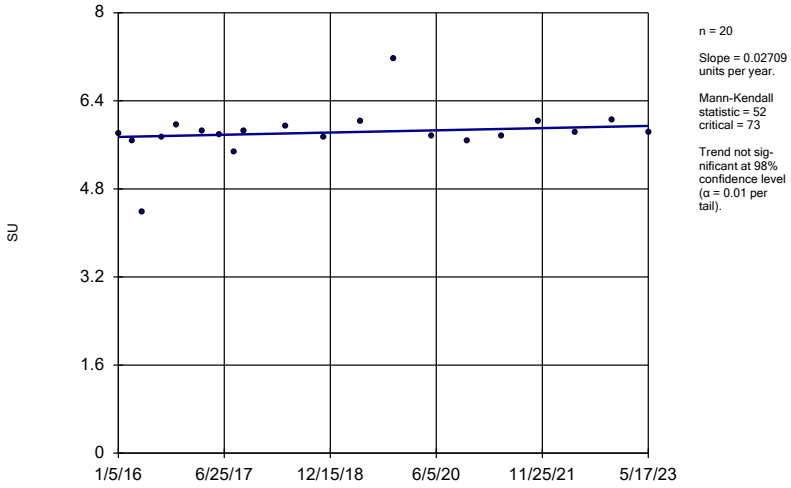
pH

MW-3 (bg)



n = 20

Slope = 0.02709 units per year.

Mann-Kendall statistic = 52 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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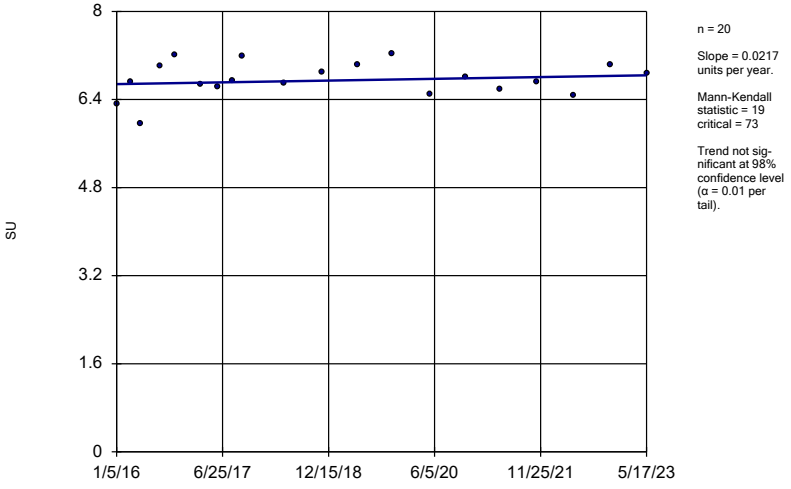
pH

MW-4



n = 20

Slope = 0.0217 units per year.

Mann-Kendall statistic = 19 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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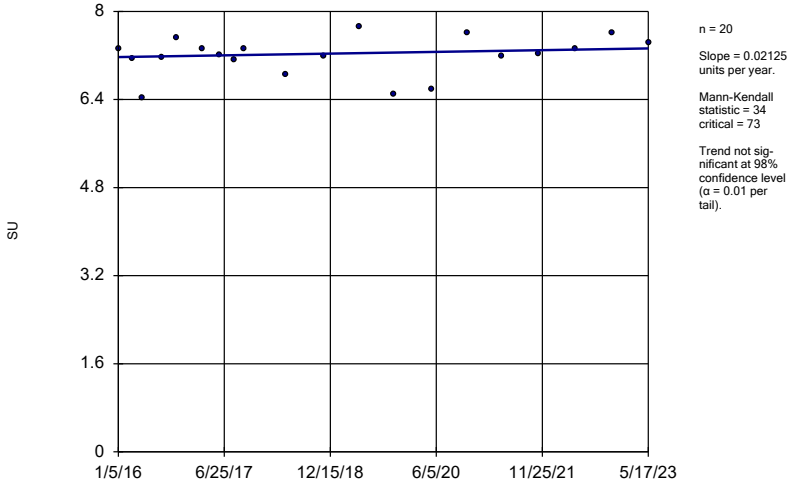
pH

MW-5



n = 20

Slope = 0.02125 units per year.

Mann-Kendall statistic = 34 critical = 73

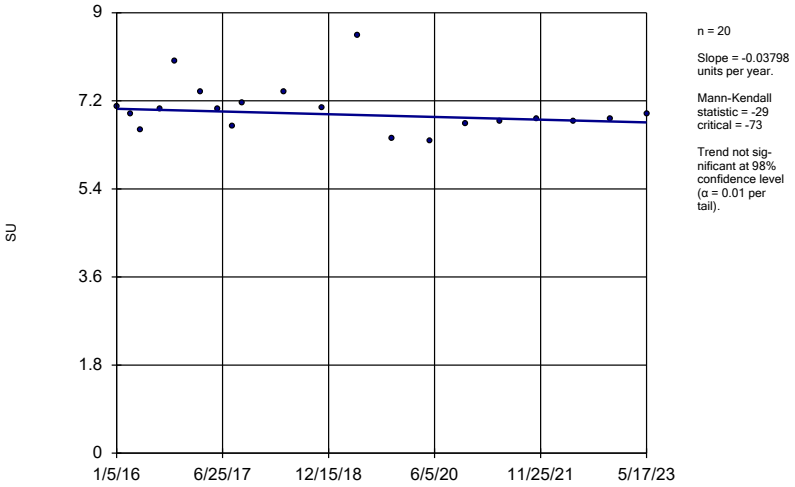
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH

MW-5A



n = 20

Slope = -0.03798 units per year.

Mann-Kendall statistic = -29 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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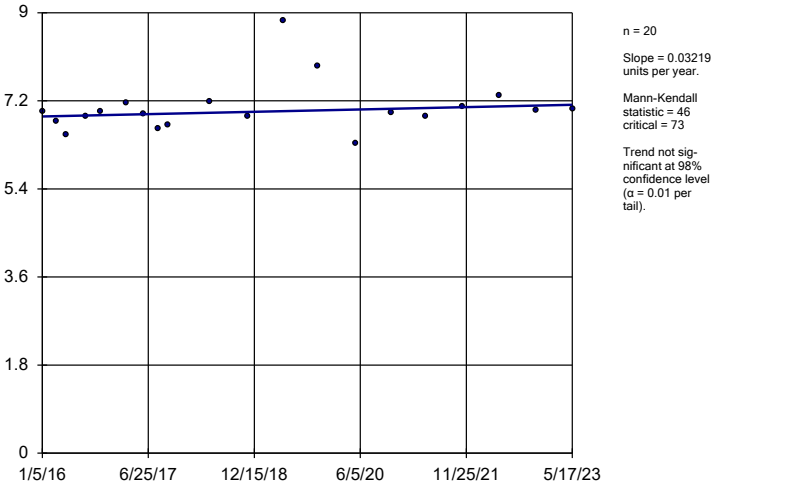
pH

MW-6



n = 20

Slope = 0.03219 units per year.

Mann-Kendall statistic = 46 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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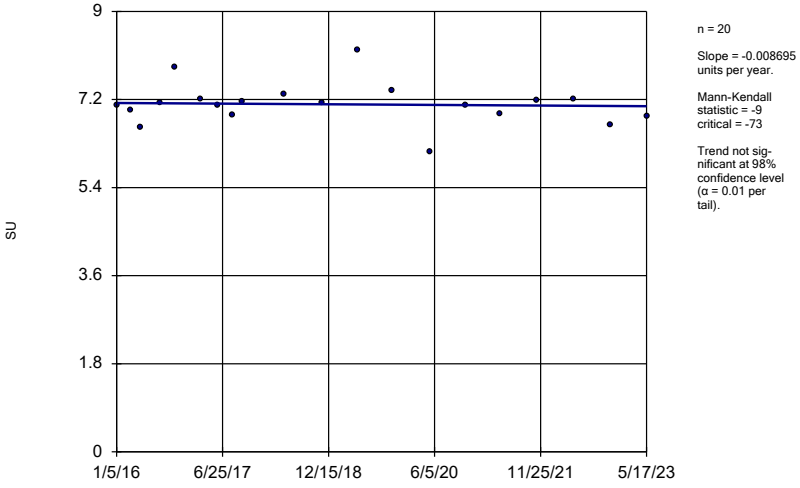
pH

MW-6A



n = 20

Slope = -0.008695 units per year.

Mann-Kendall statistic = -9 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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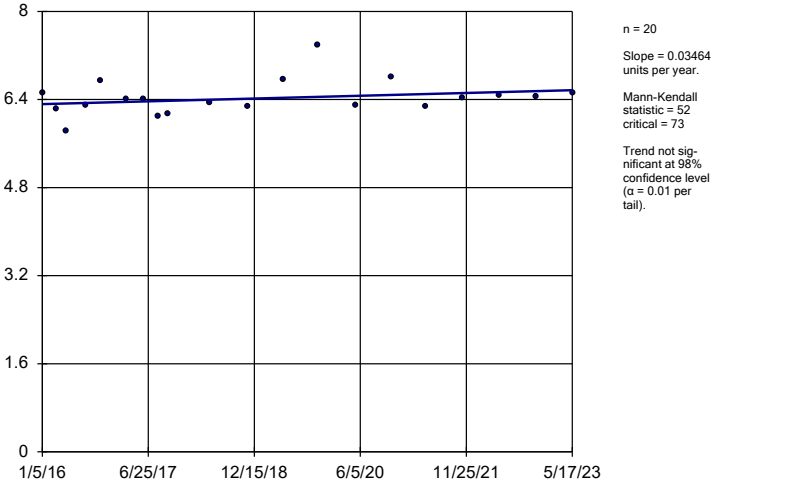
pH

MW-7 (bg)



n = 20

Slope = 0.03464 units per year.

Mann-Kendall statistic = 52 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

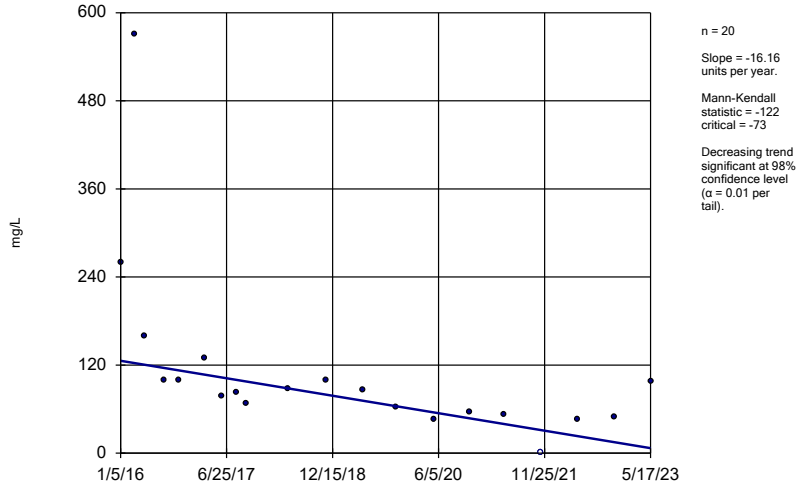
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Sulfate

MW-2 (bg)



n = 20

Slope = -16.16 units per year.

Mann-Kendall statistic = -122 critical = -73

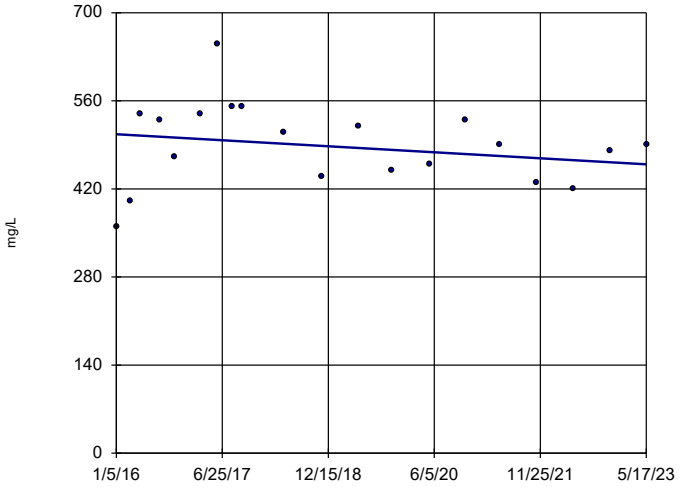
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sulfate

MW-3 (bg)



n = 20

Slope = -6.48 units per year.

Mann-Kendall statistic = -24 critical = -73

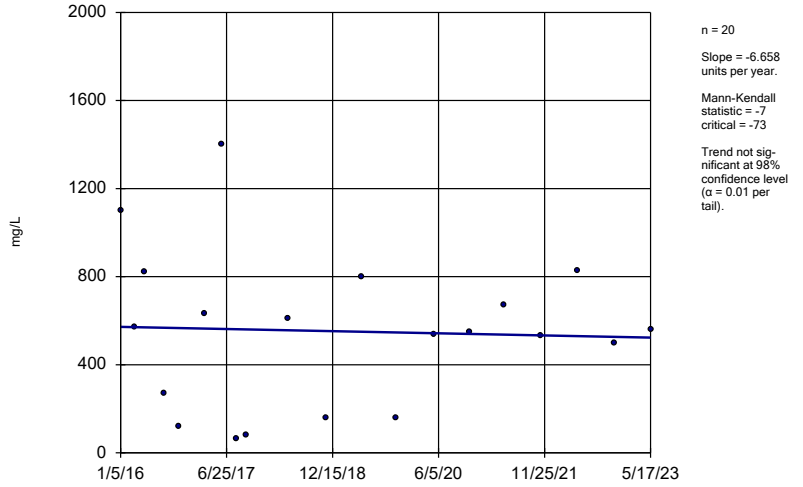
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sulfate

MW-4



n = 20

Slope = -6.658 units per year.

Mann-Kendall statistic = -7 critical = -73

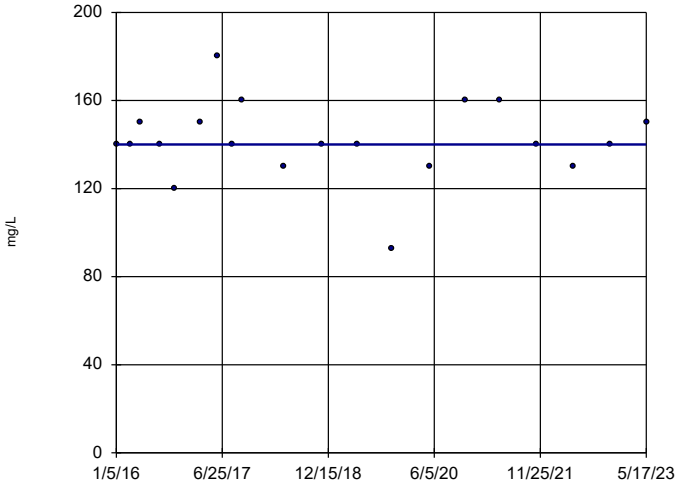
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sulfate

MW-5



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -73

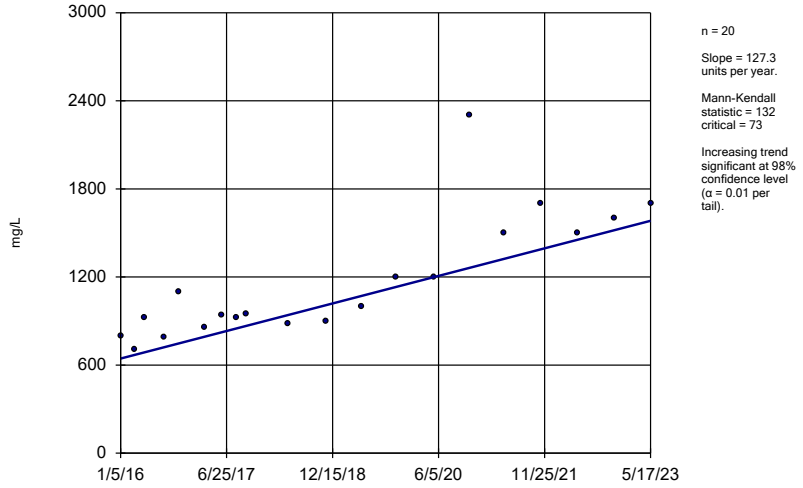
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sulfate

MW-5A



n = 20

Slope = 127.3 units per year.

Mann-Kendall statistic = 132 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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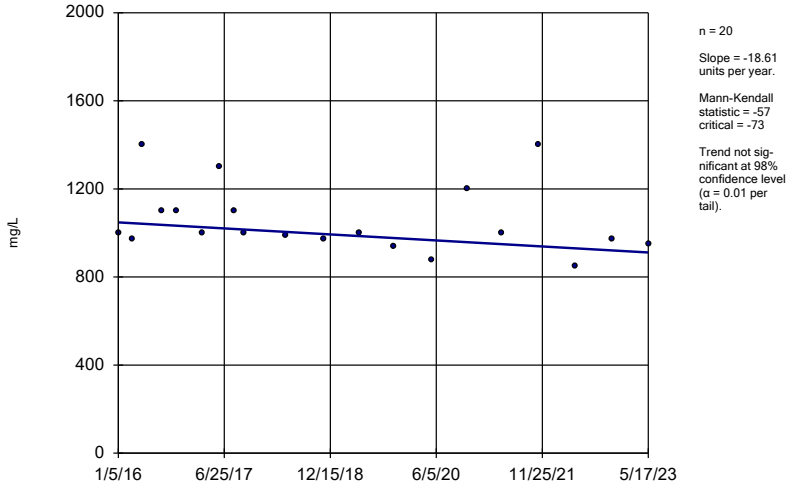
Sulfate

MW-6



n = 20

Slope = -18.61 units per year.

Mann-Kendall statistic = -57 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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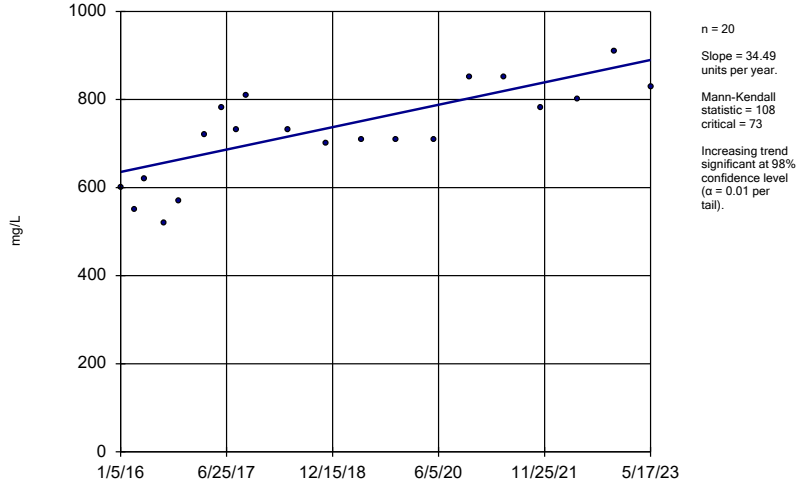
Sulfate

MW-6A



n = 20

Slope = 34.49 units per year.

Mann-Kendall statistic = 108 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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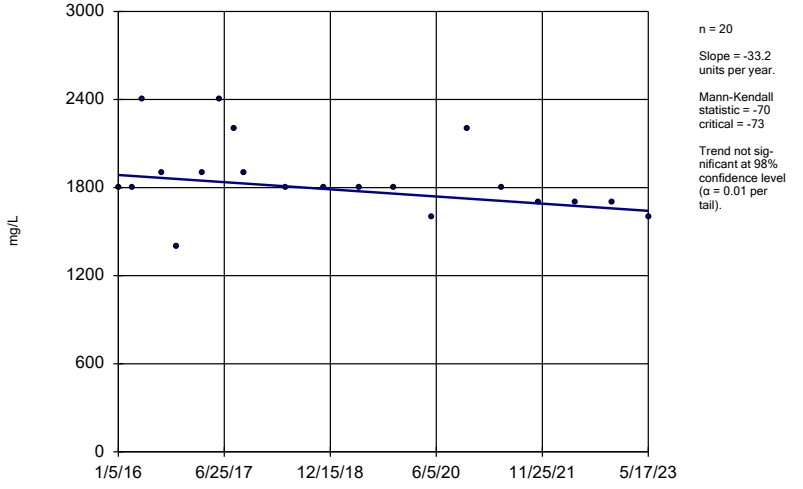
Sulfate

MW-7 (bg)



n = 20

Slope = -33.2 units per year.

Mann-Kendall statistic = -70 critical = -73

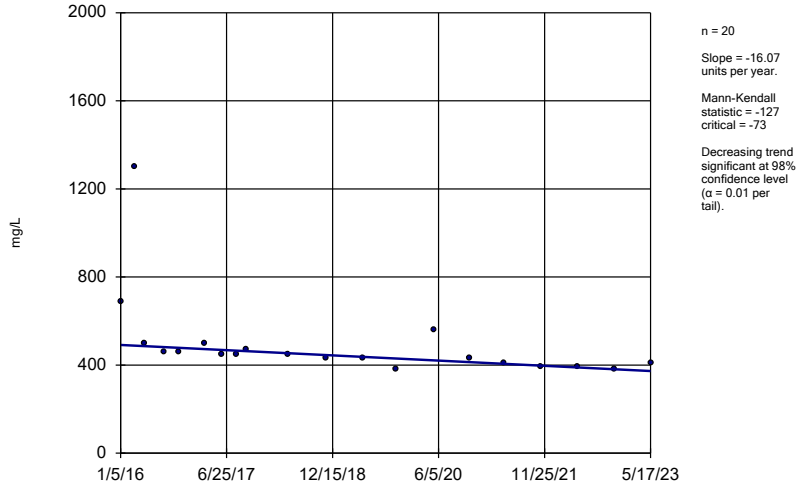
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids

MW-2 (bg)



n = 20

Slope = -16.07 units per year.

Mann-Kendall statistic = -127 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

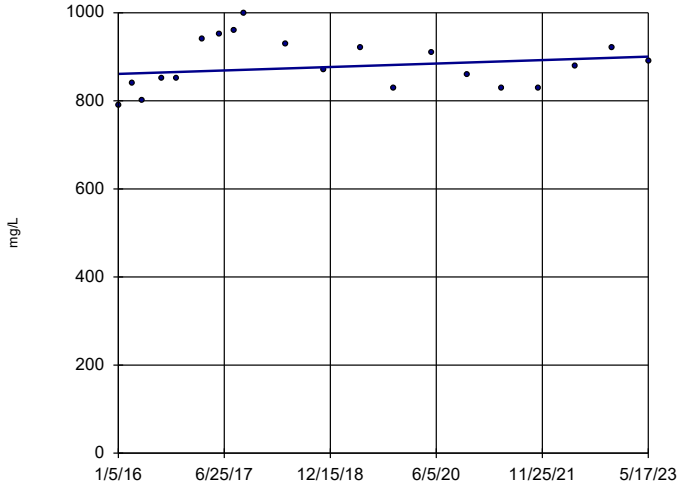
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-3 (bg)



n = 20

Slope = 5.317 units per year.

Mann-Kendall statistic = 19 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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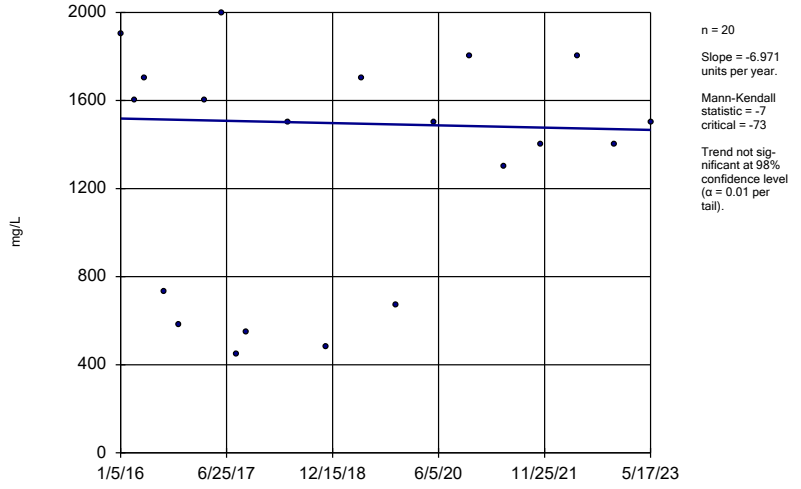
Total Dissolved Solids

MW-4



n = 20

Slope = -6.971 units per year.

Mann-Kendall statistic = -7 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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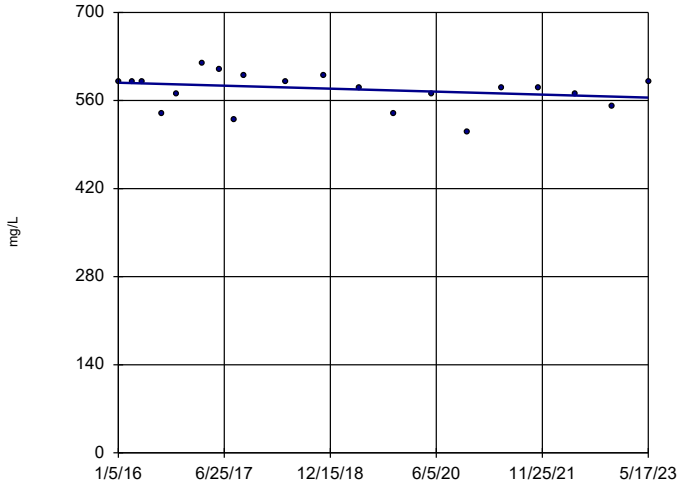
Total Dissolved Solids

MW-5



n = 20

Slope = -3.205 units per year.

Mann-Kendall statistic = -42 critical = -73

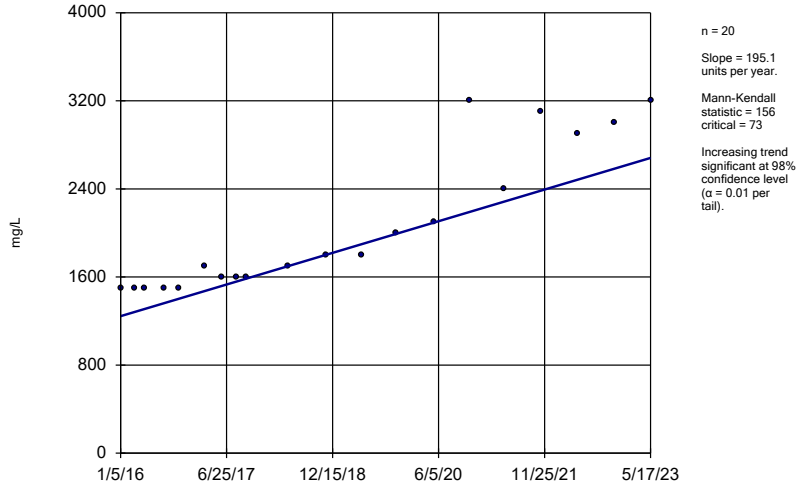
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids

MW-5A



n = 20

Slope = 195.1 units per year.

Mann-Kendall statistic = 156 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

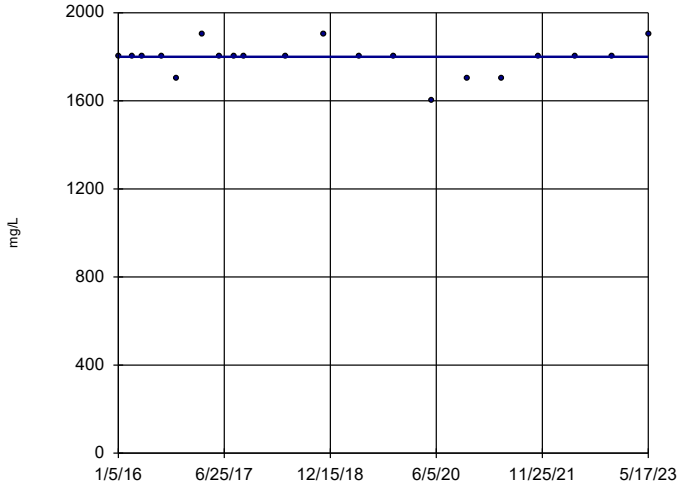
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-6



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

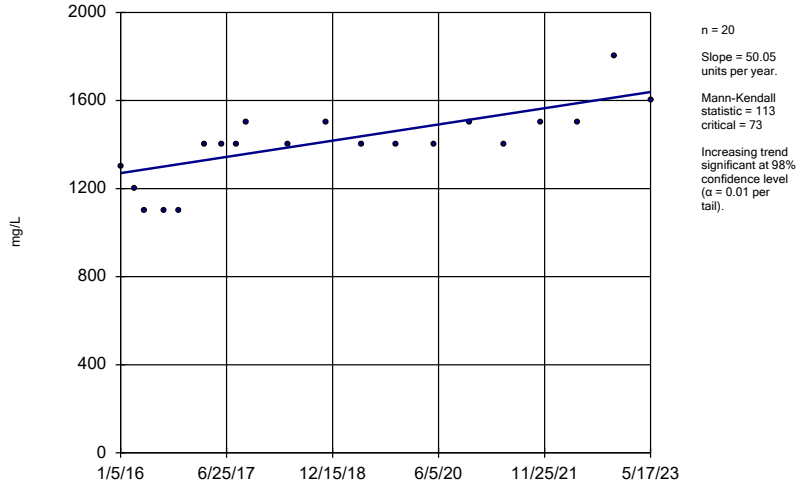
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-6A



n = 20

Slope = 50.05 units per year.

Mann-Kendall statistic = 113 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

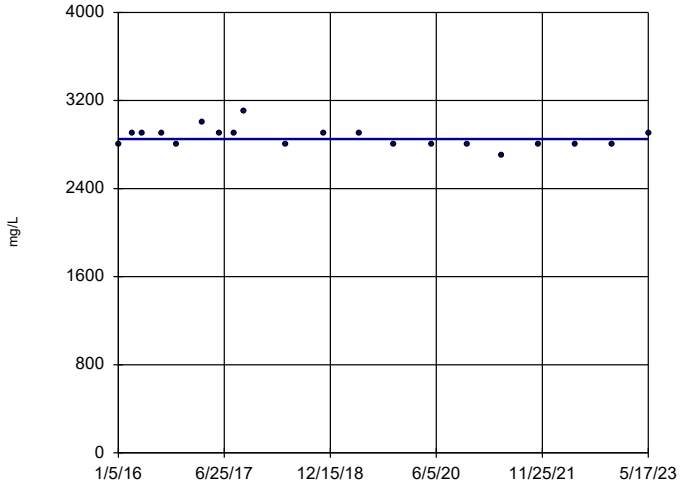
Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.0.27 Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -48 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 7/8/2025 9:57 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

ATTACHMENT 3

INTER-WELL PREDICTION LIMITS

Prediction Limit

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 7/8/2025, 10:10 AM

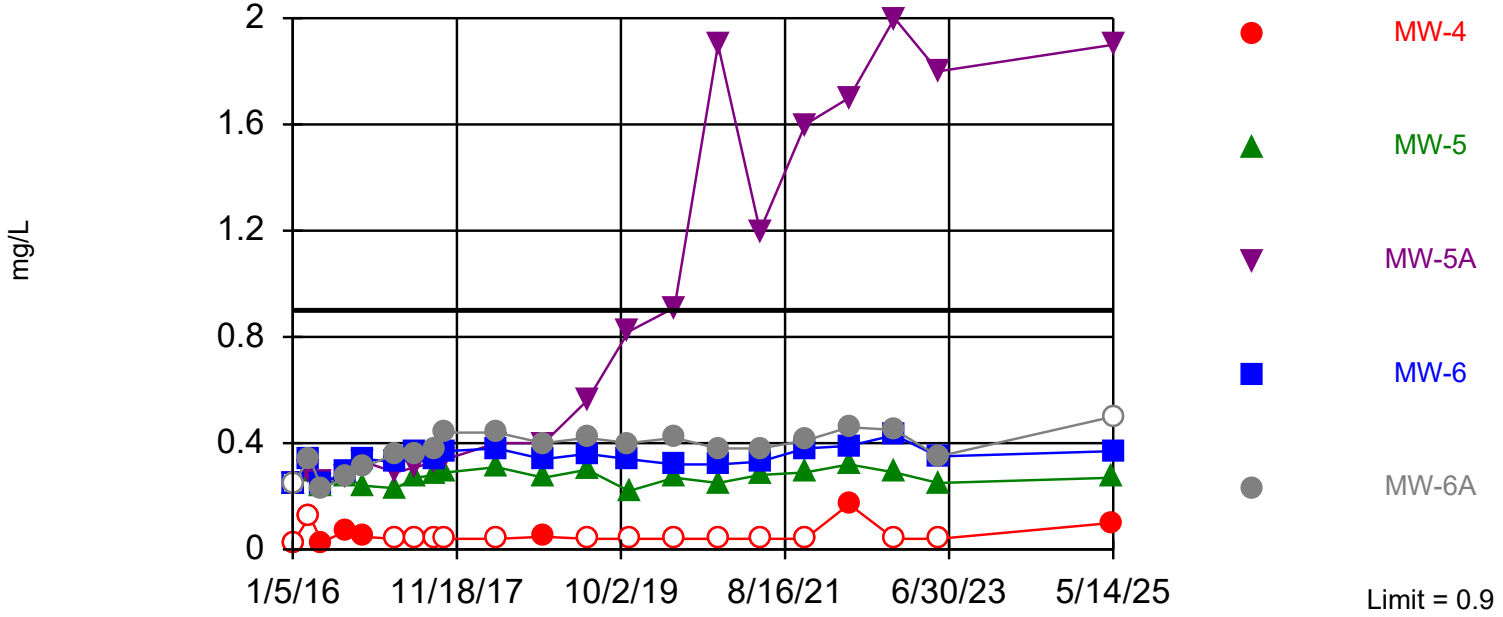
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-4	0.9	n/a	5/13/2025	0.1	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-5	0.9	n/a	5/13/2025	0.27	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	**MW-5A**	**0.9**	**n/a**	**5/14/2025**	**1.9**	**Yes**	**60**	**n/a**	**n/a**	**21.67**	**n/a**	**n/a**	**0.0005231**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	MW-6	0.9	n/a	5/14/2025	0.37	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-6A	0.9	n/a	5/14/2025	0.5ND	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-4	620	n/a	5/13/2025	110	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-5	620	n/a	5/13/2025	84	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-5A	620	n/a	5/14/2025	430	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	620	n/a	5/14/2025	250	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6A	620	n/a	5/14/2025	210	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-4	180	n/a	5/13/2025	49	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-5	180	n/a	5/13/2025	4.6	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-5A	180	n/a	5/14/2025	170	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	180	n/a	5/14/2025	38	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6A	180	n/a	5/14/2025	88	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-4	0.4397	n/a	5/13/2025	0.18	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-5	0.4397	n/a	5/13/2025	0.31	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-5A	0.4397	n/a	5/14/2025	0.37	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-6	0.4397	n/a	5/14/2025	0.43	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-6A	0.4397	n/a	5/14/2025	0.27	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
pH (SU)	MW-4	6.982	5.222	5/13/2025	6.47	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
pH (SU)	**MW-5**	**6.982**	**5.222**	**5/13/2025**	**7.28**	**Yes**	**60**	**241.4**	**53.74**	**0**	**None**	**x^3**	**0.000752**	**Param Inter 1 of 2**
pH (SU)	MW-5A	6.982	5.222	5/14/2025	6.77	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
pH (SU)	**MW-6**	**6.982**	**5.222**	**5/14/2025**	**7.06**	**Yes**	**60**	**241.4**	**53.74**	**0**	**None**	**x^3**	**0.000752**	**Param Inter 1 of 2**
pH (SU)	MW-6A	6.982	5.222	5/14/2025	6.65	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
Sulfate (mg/L)	MW-4	2400	n/a	5/13/2025	380	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-5	2400	n/a	5/13/2025	140	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-5A	2400	n/a	5/14/2025	1900	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-6	2400	n/a	5/14/2025	1100	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-6A	2400	n/a	5/14/2025	1300	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-4	3100	n/a	5/13/2025	820	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-5	3100	n/a	5/13/2025	590	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**MW-5A**	**3100**	**n/a**	**5/14/2025**	**3200**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005231**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**3100**	**n/a**	**5/14/2025**	**7700**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005231**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	MW-6A	3100	n/a	5/14/2025	2100	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2

Hollow symbols indicate censored values.

Exceeds Limit: MW-5A

Boron

Interwell Non-parametric

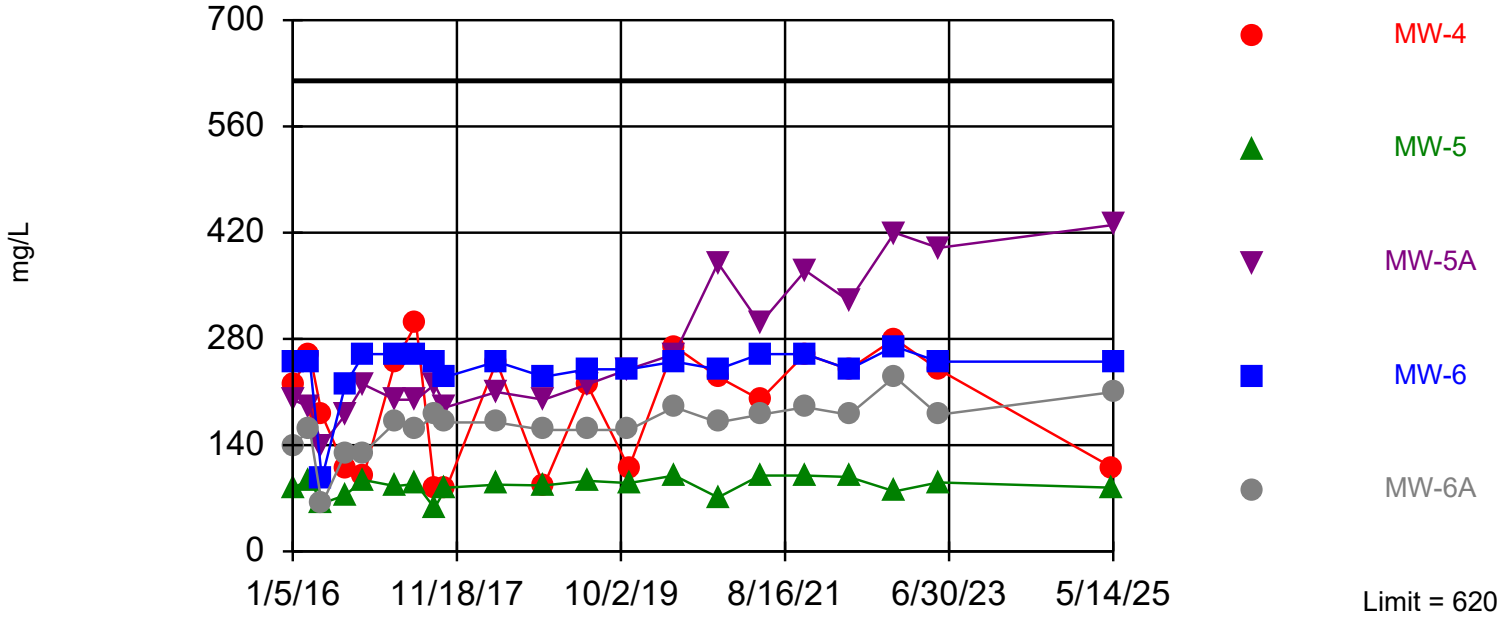


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 21.67% NDs. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

Within Limit

Calcium

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

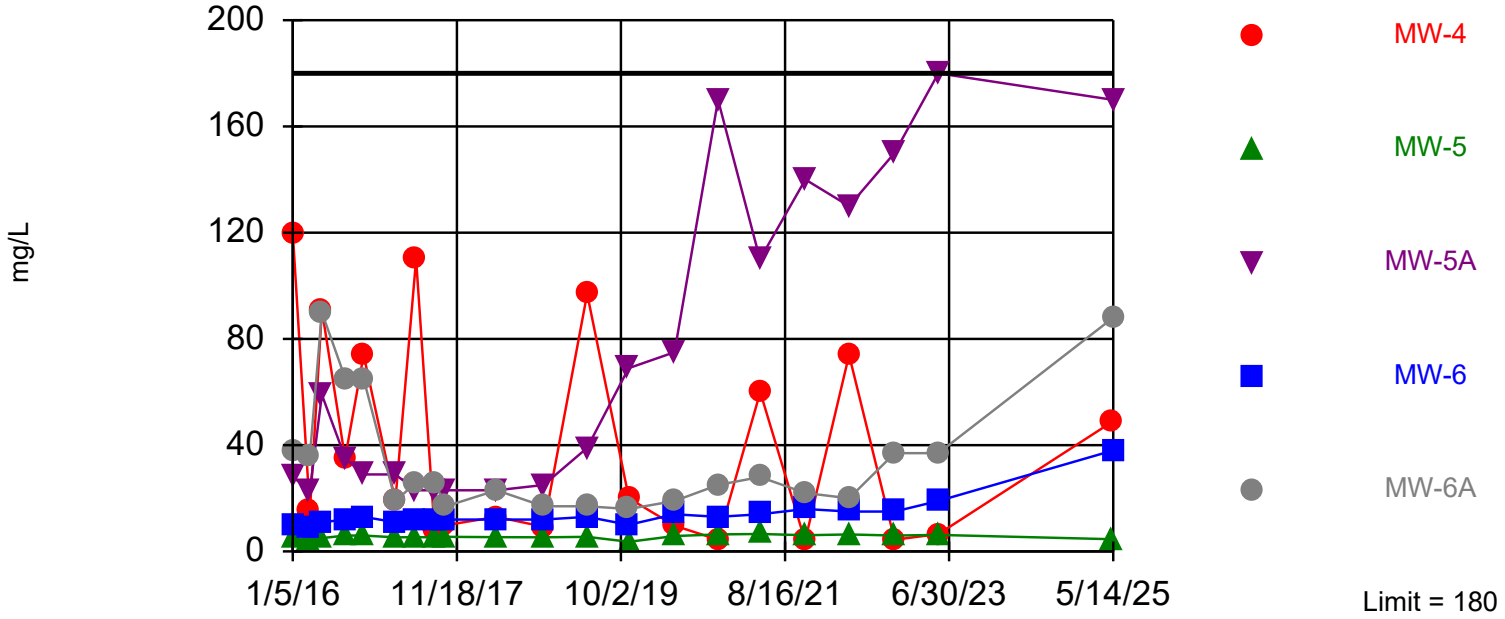
Prediction Limit Analysis Run 7/8/2025 10:07 AM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Within Limit

Chloride

Interwell Non-parametric



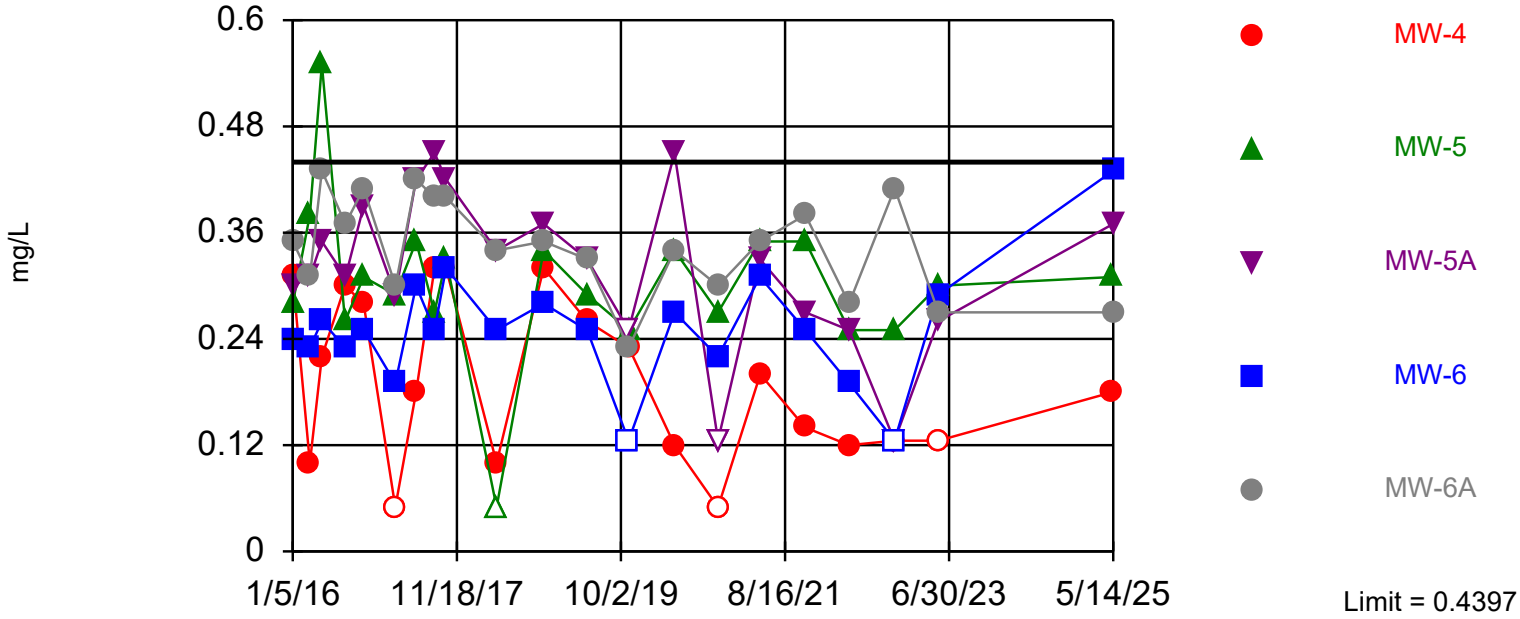
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

Hollow symbols indicate censored values.

Within Limit

Fluoride

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-1.58, Std. Dev.=0.4116, n=60, 15% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9605, critical = 0.945. Kappa = 1.842 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

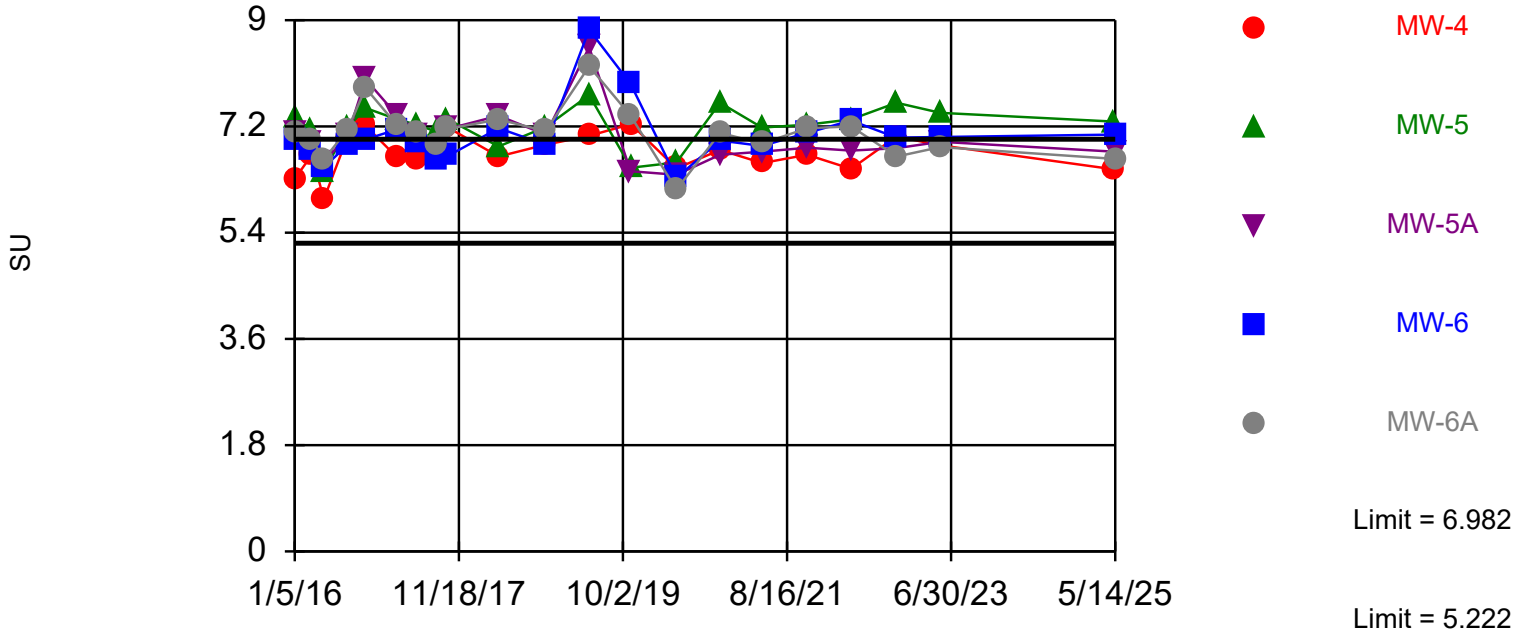
Prediction Limit Analysis Run 7/8/2025 10:08 AM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Exceeds Limits: MW-5, MW-6

pH

Interwell Parametric

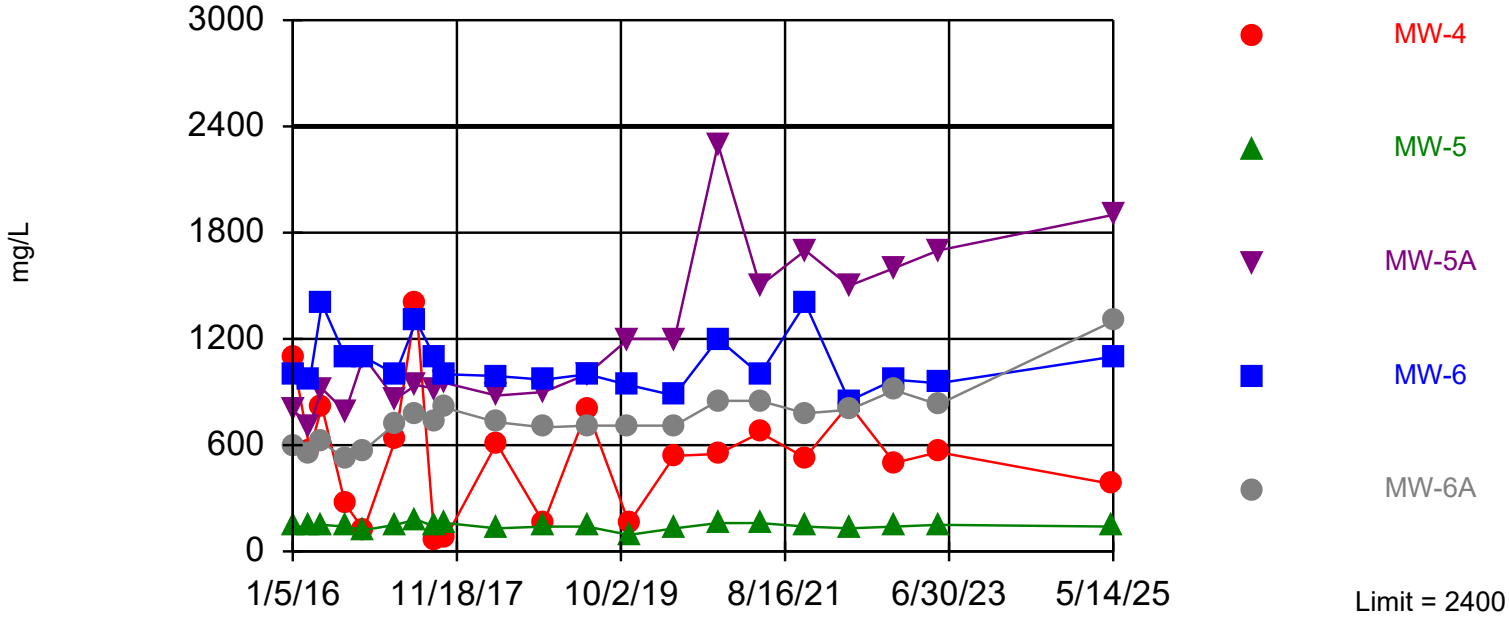


Background Data Summary (based on cube transformation): Mean=241.4, Std. Dev.=53.74, n=60. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9466, critical = 0.945. Kappa = 1.842 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000752. Comparing 5 points to limit.

Within Limit

Sulfate

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 1.667% NDs. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

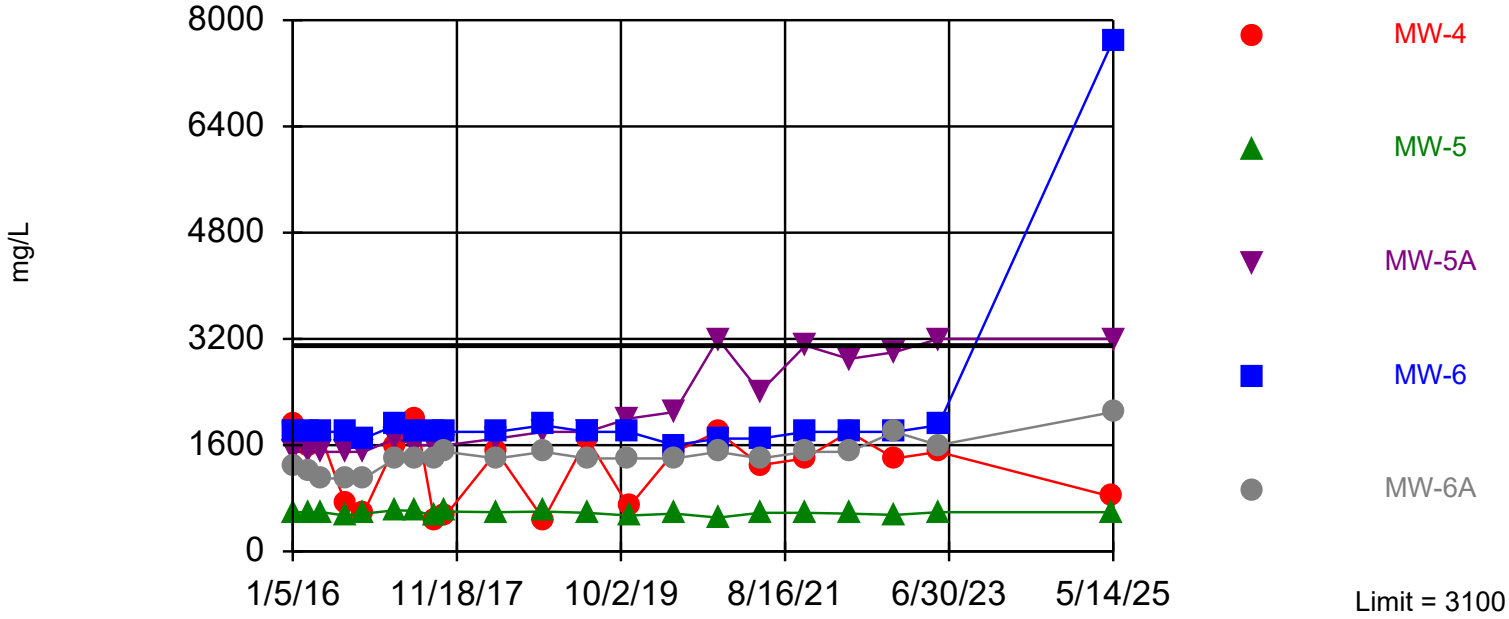
Prediction Limit Analysis Run 7/8/2025 10:09 AM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Exceeds Limit: MW-5A, MW-6

Total Dissolved Solids

Interwell Non-parametric

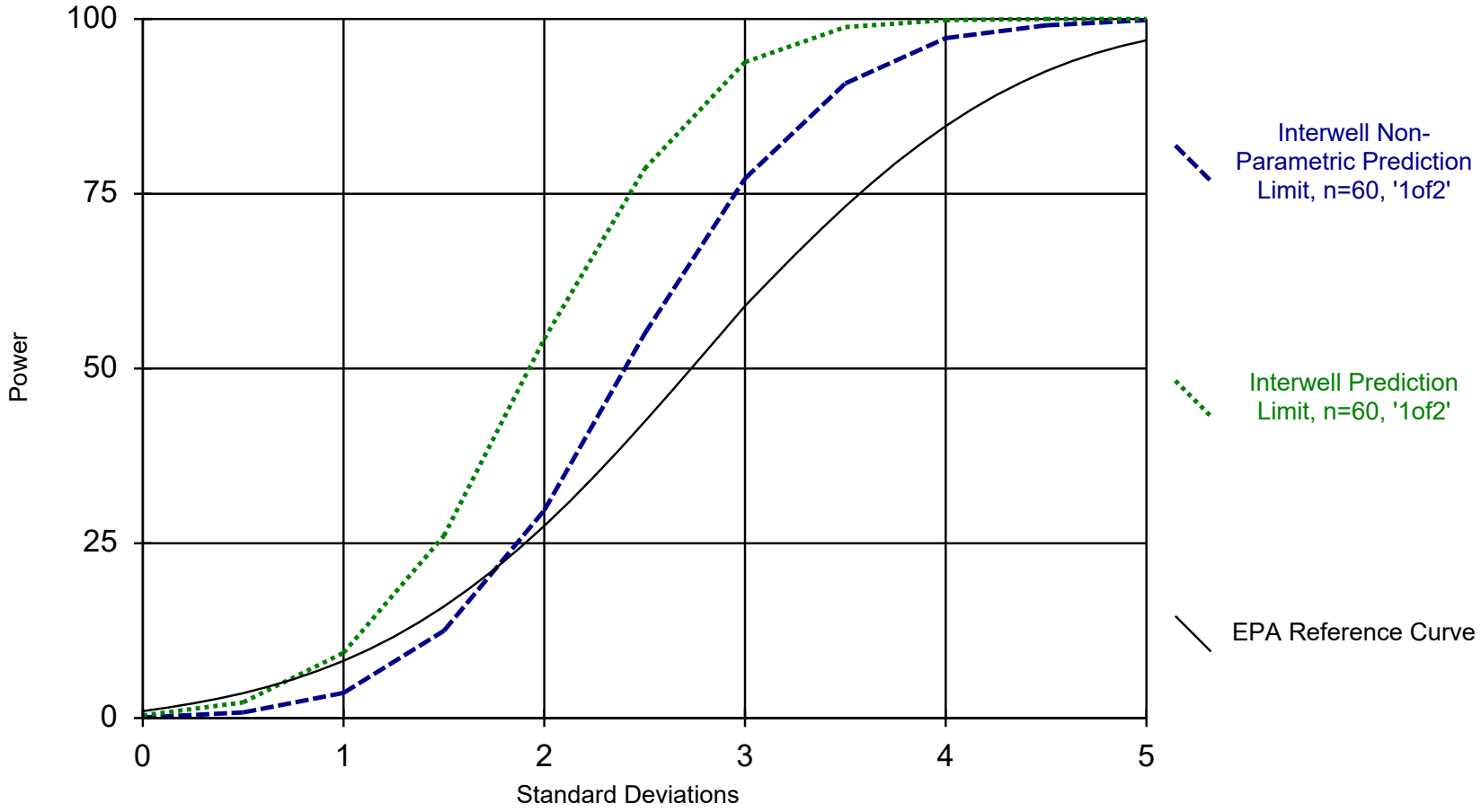


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

ATTACHMENT 4

STATISTICAL POWER CURVES

Power Curve



Analysis Run 7/8/2025 10:01 AM

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

APPENDIX B

November 2025 Sampling Event

Groundwater Monitoring, Sampling & Statistics Per EPA CCR Rule (CFR § 257.90 - 257.98)

November 2025 Sampling Event

Asbury Power Plant CCR Impoundment
Jasper County, MO

January 2026

Prepared For:
The Empire District Electric Company
602 S. Joplin Avenue
Joplin, Missouri 64801

Midwest Environmental CONSULTANTS

2009 E. McCarty St., Ste. 2 Jefferson City, MO 65101 (573) 636-9454 www.mecpc.com

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1.0 INTRODUCTION

The EPA Coal Combustion Residual Regulations (40 CFR Part 257) (CCR Rule) require groundwater monitoring of CCR impoundments. This Asbury Power Plant CCR impoundment groundwater monitoring sampling report is in accordance with the EPA CCR Rule. In accordance with the EPA CCR Rule (§ 257.90 - 257.98) the status of the Groundwater Monitoring was placed on-line October 17, 2017, as required by the EPA CCR rule. Empire notified the Missouri Department of Natural Resources (MDNR) "State Director" via e-mail when this document was posted on-line, as required in the CCR rule.

The EPA CCR Rule requires the annual groundwater report to be prepared by January 31st of the following year. The first report was due January 31, 2018. This report was prepared in general accordance with the EPA CCR Rule for groundwater requirements. These regulations outline groundwater monitoring requirements and data evaluation methods. The annual groundwater report for the 2024 sampling events will be posted on-line within 30 days of placement in the operating record and the State Director will be notified.

A Site Characterization Workplan was submitted to the MDNR. On November 2, 2017, the facility received approval from MDNR that the site had been properly characterized and the facility could begin groundwater monitoring (included in **Appendix 1**).

The purpose of the groundwater monitoring system is to monitor the ground water quality surrounding the facility and to evaluate potential impacts and/or releases from facility operations. Eight rounds of background groundwater data were collected from January 2016 to August 2017. After the background data is obtained and after the first semi-annual sampling event, a reduced sampling frequency replaced the quarterly events to semi-annual events. This reduced sampling frequency will generally be completed during the months of May and November. Statistical analysis for EPA Appendix III results began after the first semi-annual sampling event which was collected on October 4, 2017. This analysis was to determine if a statistically significant increase (SSI) has occurred. If an SSI is verified, additional evaluation is required to determine if the SSI was caused by the CCR impoundment.

The Asbury Power Plant was retired on March 1, 2020. Residual fly ash, bottom ash, and other related wastes were placed in the impoundment area until April 1, 2021, as part of the decommissioning activities. On April 1, 2021, a Notification of Intent to Close CCR Surface Impoundment was posted to the facility's website and the State Director (MDNR) was notified. Dewatering of the impoundment was occurring during the first part of 2022. CCR grading, excavation and relocation activities began in June of 2022. Closure of the CCR impoundment was completed on January 23, 2023.

On November 5 and 6, 2025, a semi-annual sampling event was conducted per the EPA CCR Rule (§ 257.90 – 257.98). Nine (9) groundwater monitoring wells were sampled and analyzed for the EPA Appendix III. In addition, MW-5AR which began sampling in May 2023 was also analyzed for EPA Appendix IV parameters. MW-5AR was installed in April 2023 in response to the Alternative Source Demonstration (ASD) which was completed in April 2021. The ASD was placed in the operating record. After review of the first semi-annual groundwater sampling event analytical results completed in October 2017, the constituents listed in Appendix IV were eliminated from the overall semi-annual detection monitoring plan in accordance with the EPA CCR Rule. For

quality assurance and quality control measures, a duplicate sample at MW-5 was taken. These samples were preserved and submitted directly to the laboratory.

This report is a summary of the November 2025 sampling event and the findings of the statistical analysis of the results of the groundwater monitoring program at the Asbury Power Plant CCR Impoundment. Specific information about each sampling event can be obtained from the individual report which is part of the Asbury Operating Record.

2.0 SITE LOCATION

The site occupies the north half of Section 17, Township 30 North, and Range 33 West on the Asbury 7.5-Minute Quadrangle Map as seen in **Figure 1**. The site is located approximately 5.5 miles north-northeast of Asbury, Missouri, about 14 miles north-northwest of Joplin, Missouri. A map showing the locations of the monitoring wells is in **Figure 2**.

2.1 History

In March 1996, five (5) groundwater monitoring wells, MW-1 through MW-5, were installed around the perimeter of the Asbury Power Plant CCR impoundment. Monitoring wells MW-1, MW-2 and MW-3 were installed to a total depth of between 27.0 to 28.5 feet below ground surface (bgs). Monitoring wells MW-4 and MW-5 were installed to a total depth of 48 feet bgs. Each of the five monitoring wells was equipped with 10-foot well screens. The five wells were then developed, purged, and sampled in 1996.

In 2003, two (2) additional groundwater monitoring wells were installed and identified as MW-6 and MW-7. Both wells had 2-inch diameter PVC well casings installed to an approximate total depth of 44 feet bgs. Both wells were installed with an above ground steel protective cover. No other construction details such as well screen lengths were available for these two (2) wells. In December 2015, two (2) additional groundwater monitoring wells were installed and identified as MW-5A and MW-6A.

In April 2023, monitoring well MW-5AR was installed as proposed in the Alternative Source Demonstration completed April 2021. As part of this well installation maintenance of the entire groundwater monitoring well system was also completed. This included the installation of new concrete well pads, protective covers, and protective bollards. The well riser pipe was also modified for well cap installation. New as-built survey data was obtained and will be utilized in this and future reports. MW-5A will not be removed until after the eight (8) background samples have been collected for MW-5AR.

All wells are registered with MDNR – Missouri Geological Survey Program.

The Asbury Power Plant was retired on March 1, 2020, but residual fly ash, bottom ash, and other related wastes were placed in the impoundment area as part of the decommissioning activities. The facility is now known as the Asbury Renewable Operations Center. On April 1, 2021, a Notification of Intent to Close CCR Surface Impoundment was posted to the facility's website and the State Director (MDNR) was notified. Dewatering of the impoundment was occurring during the first part of 2022. CCR grading, excavation and relocation activities began in June of 2022. Closure of the CCR impoundment was completed on January 23, 2023.

2.2 Site Geology

Drilling and subsurface investigation activities at the Site and as part of the MDNR approved CCR landfill Detailed Site Investigation (DSI) for the adjacent landfill area identified three (3) primary geologic units at the Site. These geologic units include the surficial soil layer, Warner Sandstone (uppermost aquifer), and Riverton Shale (confining unit). The information presented herein includes the primary elements of a site characterization work plan consistent with the MDNR guidance.

Surficial Soil. Soils at the site consist of a surficial unit of cohesive soils (e.g., CL, SC, ML, and CH) underlain by Pennsylvanian-age bedrock. Soil thickness at the Site ranges from approximately 15-25 feet.

Warner Sandstone. The Warner Sandstone (Sandstone) is the uppermost bedrock unit in the south portion of the Site. In the north area of the Site, the Sandstone is overlain by the Riverton Shale (Shale). Based on the DSI information, the Sandstone and Shale can occur as alternating layers. The Sandstone and Shale are gradational in places and transition from shaley sandstone to sandy shale. According to the MDNR publication on the Pennsylvanian Subsystem in Missouri, the Warner Sandstone formation is described as follows: "Generally, the lower part is interbedded, very fine-grained sandstone and claystone. The upper part is largely medium bedded to massive channel fill sandstone. In places, the Warner consists primarily of shale and claystone, with only minor amounts of sandstone" and "ranges in thickness from 0 to 15m (49.2 ft.)."

The Sandstone is more than 25-30 feet thick in places and is generally medium hard and thin to medium bedded with occasional shale partings. The degree of induration of the Sandstone varies and generally increases with depth. Slug tests performed at selected DSI piezometers screened in the Sandstone exhibited hydraulic conductivities ranging from approximately 1.3x10-4 cm/sec to 5.9x10-6 cm/sec. The slug test results are consistent with values for sandstone and shaley sandstone. The groundwater gradient is towards the east and Blackberry Creek.

Riverton Shale. Layers of the Riverton Shale (Shale) exhibited thicknesses ranging from approximately one foot to more than 10 feet. The Shale is generally dark gray to light gray. The Shale is mainly thin bedded with hardness ranging from soft to hard. Six packer tests were performed during the DSI to assess the hydraulic conductivity of the Shale. The packer test results ranged from approximately $3.2x10^{-6}$ cm/sec to $4.9x10^{-8}$ cm/sec. The packer test data indicates that the Shale is an effective confining unit.

According to the MDNR publication on the Pennsylvanian Subsystem in Missouri, the Riverton Shale formation is described as "dark gray to black, fine-grained, relatively brittle shale and contains as many as three coal beds, each of which is underlain by underclay" and "varies in thickness from a featheredge to more than 90 feet".

Unnamed Coal. The Shale includes coal seams in places that range in thickness from a few inches to approximately 1.5 feet. The coal is generally black to dark gray.

2.3 Groundwater Monitoring Network Design

The groundwater monitoring system for the CCR impoundment consists of nine (9) groundwater monitoring wells plus the recently installed MW-5AR. Two (2) wells are considered upgradient. Two (2) wells are considered sidegradient; one sidegradient well (MW-1) is only monitored for groundwater elevation. The remaining five (5) wells are considered downgradient along with the recently installed MW-5AR.

The groundwater monitoring wells (MWs) at the Asbury Power Plant is equipped with individual dedicated poly tubing to be connected to a peristaltic pump/controller at the surface. Low-flow, micro-purge and sampling techniques and technology are utilized to collect groundwater samples from the subject wells. The groundwater sampling procedures are discussed in further detail below.

2.4 Groundwater Monitoring Network

The locations of the monitoring wells are shown in **Figure 2**. The groundwater monitoring system for the site consists of the following monitoring wells:

- MW-1 Sidegradient (water level only)
- MW-2 Upgradient
- MW-3 Upgradient
- MW-4 Downgradient
- MW-5 Downgradient
- MW-5A Downgradient
- MW-5AR Downgradient (background sampling)
- MW-6 Downgradient
- MW-6A Downgradient
- MW-7 Sidegradient

2.5 Seasonal Variation

Historical groundwater elevation data has been limited. However, adequate lengths of well screen have been utilized during the construction of the wells to accommodate typical seasonal groundwater elevation variations seen in southwest Missouri.

2.6 Groundwater Flow Direction

Historically, the seasonally high potentiometric surface indicated the groundwater flow direction to the east. **Figure 3** is a potentiometric map for this sampling event.

Originally MW-7 was thought to be a downgradient well but review of the potentiometric mapping from the eight background sampling events revealed that the well is a sidegradient well. Therefore, the designation for MW-7 has been changed from a downgradient to a sidegradient well for compliance monitoring.

3.0 BACKGROUND GROUNDWATER DATA

In accordance with EPA CCR Rule § 257.94(b), the site initiated the detection monitoring program in January 2016 to include obtaining a minimum of eight (8) independent samples for each background and downgradient well. The eight (8) independent groundwater samples were obtained and analyzed as required by the CCR Rule per the groundwater monitoring plan. Background groundwater data was collected from January 2016 to August 2017.

Groundwater Monitoring Reports were completed for each sampling event and have been placed in the Operating Record. A listing of each background groundwater sampling event is below:

- January 2016
- March 2016
- May 2016
- August 2016
- October 2016
- March 2017
- June 2017
- August 2017

Initial background monitoring was required at all monitoring wells. The sampling frequency was quarterly or more frequently for the first two (2) years. After the background data plus the first semi-annual sampling events, a reduced lower sampling frequency replaced the quarterly events to semi-annual events. This lessened sampling frequency will be completed during the months of April/May/June and October/November/December. MW-5AR background monitoring started in May 2023 and will be completed semi-annually until eight (8) rounds of background sampling data are obtained.

The initial two (2) years of background and the first semi-annual detection monitoring included parameters listed in Appendix III and Appendix IV of the EPA CCR Rule. The constituents listed in Appendix IV were eliminated from the overall semi-annual detection monitoring plan after review of the first semi-annual groundwater sampling event analytical results in January 2018, according to the EPA CCR Rule.

4.0 GROUNDWATER SAMPLING EVENT

On November 5 & 6, 2025, nine (9) groundwater monitoring wells were sampled by Midwest Environmental Consultants (MEC) for the EPA CCR Rule Appendix III parameters. In addition, MW-5AR was also sampled for Appendix III and Appendix IV parameters. For quality assurance and quality control measures, a duplicate sample was taken at MW-5. The sampling protocol and methodology was to be conducted in accordance with the facility's Sampling and Analysis Plan. **Table 1** provides a list of the analytical methods employed by the subcontracted laboratory.

Table 1 – Analytical Methods	
Method	**Description**
9056A	Anions, Ion Chromatography
6020A	Metals (ICP/MS)
SM 2540C	Solids, Total Dissolved (TDS)
Field Sampling	Field Sampling

Appendix 2 includes Monitoring Well Field Inspection sheets and field notes. The physical integrity of the wells was good. During sample collection each of the wells was monitored for pump discharge and formation recharge. Initially, a static water level for each well was recorded (**Table 2**). To ensure sufficient recharge while sampling, static water levels were collected during pumping. Prior to sample collection, field parameters for each well were measured with a flow-through meter. When the field parameters stabilized, samples for analytical testing were collected and placed on ice for hand delivery to the laboratory. At the conclusion of sample collection from each well, a final static water level measurement was obtained. The samples were collected in the appropriately pre-preserved sample containers and placed on ice for delivery.

Table 2 - Groundwater Sampling Field Parameters Summary During November 2025 Sampling Event				
WELL ID	**STATIC WATER LEVEL (ft-BTOC)**		**PURGE RATE (mL/min)**	**STABILIZED pH**
	Initial	**Final**		
MW-1*	8.97	NA	NA	NA
MW-2	4.01	5.96	200	6.15
MW-3	2.59	2.65	200	5.78
MW-4	8.35	13.79	200	6.61
MW-5	0.10	10.17	200	7.23
MW-5A	9.35	17.42	200	6.61
MW-5AR	1.56	10.42	200	7.46
MW-6	9.68	18.36	200	6.92
MW-6A	8.73	17.31	200	6.38
MW-7	6.08	6.21	200	6.28

* Water Level Only NA – Not Applicable

Appendix 3 includes the analytical results for the sampling event. Included with this analytical report are sample information; chain of custody; wet chemistry data; and volatile data.

5.0 DATA VALIDATION PROCEDURES FOR GROUNDWATER MONITORING DATA

Midwest Environmental Consultants receives Data Packages from the analytical laboratory (Eurofins). The internal quality control/quality assurance case narratives and reported data are then reviewed. Generally, the data validation procedures established by the U.S. Environmental Protection Agency *Contract Laboratory Program Functional Guidelines for Organic Data Review* and *Functional Guidelines for Inorganic Data Review* is followed. These guidelines are used to assign data qualifiers to the data. A formal data validation report for the site is not prepared; however, any significant issues are noted in the groundwater monitoring report.

MEC evaluates the data set for precision, accuracy, representativeness, comparability, and completeness (PARCC).

5.1 Precision

Laboratory Precision. Laboratory quality control procedures to measure precision consist of laboratory control sample (LCS) analysis and analysis of matrix spike/matrix spike duplicates (MS/MSD). These analyses are used to define analytical variability.

Field Precision. Analyses of duplicate samples are used to define the total variability (replicability) of the sampling/analytical system. Field replicates are collected at a rate of one per sampling event.

5.2 Accuracy

Accuracy is determined by calculating the percent recoveries for analyses of surrogate compounds, LCSs, continuing calibration check standards, and matrix spike samples. Acceptable percent recoveries are established for SW-846 and EPA methods. Field and laboratory blank analysis are also used to address measurement bias.

Field Blanks. Field blanks consisted of a trip blank and a field blank. At least one trip blank per cooler shipment accompanies samples for volatile organic analyses.

Laboratory Blanks. Method blanks, artificial, matrix-less samples, are analyzed to monitor the laboratory analysis system for interferences and contamination from glassware, reagents, etc. Method blanks are taken through the entire sample preparation process. They are included with each batch of extractions or digestion prepared, or with each 20 samples, whichever is more frequent.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely reflects site condition. Representativeness of the data is determined by comparing actual sampling procedures to those delineated in the field sampling plan, comparing results from field replicate samples, and reviewing the results of field blanks. Field notes are reviewed as part of our data validation process.

5.4 Comparability

Comparability expresses the confidence with which one data set can be compared to another data set measuring the same property. Comparability is ensured by using established and approved sample collection techniques and analytical methods, consistent basis of analysis, consistent reporting units, and analyzing standard reference materials.

5.5 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected under controlled laboratory conditions. Completeness is defined as the valid data percentage of the total tests requested. Valid data are defined as those where the sample arrived at the laboratory intact, properly preserved, in sufficient quantity to perform the requested analyses, and accompanied by a completed chain-of-custody form. Furthermore, the sample must have been analyzed within the specified holding time and in such a manner that analytical QC acceptance criteria were met.

6.0 GROUNDWATER ANALYSIS

Groundwater samples were submitted to Eurofins Environmental Testing for analysis.

6.1 Sampling Results

The constituents with results above the laboratory reporting limits are included in **Table 3**. This table also includes the recently installed MW-5AR. The Eurofins laboratory analytical results are included in **Appendix 3**.

Table 3 – Constituents During November 2025 Sampling Event

Constituent	Units	MCL	MW-2 (up)	MW-3 (up)	MW-4 (down)	MW-5 (down)	MW-5A (down)	MW-5AR (down)	MW-6 (down)	MW-6A (down)	MW-7 (side)
Appendix III											
Boron	ug/L	NE	100	<100	100	320	2500	420	450	<700	<400
Calcium	mg/L	NE	35000	100000	85000	91000	480000	110000	290000	240000	500000
Chloride	mg/L	NE	100	49	29	5.8	160	6.2	34	70	37
Fluoride	mg/L	4.0	0.19	0.11	0.21	0.28	0.27	0.23	0.25	0.17	0.19
pH	SU	NE	6.15	5.78	6.61	7.23	6.61	7.46	6.92	6.38	6.28
Sulfate	mg/L	NE	120	520	250	150	2000	410	1100	1200	1800
Total Dissolved Solids	mg/L	NE	430	910	520	580	3300	900	2000	2000	2800

NE = Not Established

<x = Less than reporting limit (nondetectable)

J = Trace value seen above minimum detection limit but below reporting limit (trace)

No Constituents were detected above the Federal Safe Drinking Water maximum contaminant level (MCL) during the sampling event.

6.2 Statistical Analysis Approach

Prediction interval analyses compare one or more observations to a limit set by background data. Interwell analyses compare observations from background wells, which include upgradient and sidegradient wells per EPA Unified Guidance definitions, and their relation to the observations for the downgradient wells. Due to varying geology in the state of Missouri, intrawell analyses had initially been deemed a more appropriate statistical method.

On January 21, 2020 MDNR forwarded an email from the USEPA that requested the site change the statistical evaluation methodology to interwell prediction limits. This correspondence is located in **Appendix 1.** The EPA review of the groundwater reports is summarized in **Table 4.**

Table 4 – EPA Review of Groundwater Reports	
Facility	Asbury Power Plant
Location	Asbury, MO
Owner	Empire District Electric Company
Units	Upper Pond-unlined, South Pond-unlined, Lower Pond-unlined
Geology	Surficial unit of clay, clayey sand, and silt approximately 15 to 25 feet thick underlain by Warner Sandstone approximately 25-30 feet thick in the southern portion of the site and the Riverton Shale in the northern area of the site
Problematic Use of Intra Well Comparisons	Analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells. Consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra well analysis
Problematic Alternate Source Determination	
Conclusions	While there are no boring logs in the documents to confirm that the wells are screened in the same geologic unit, consistency in the field parameters and the description of the geology suggest that the wells are screened in the sandstone. The analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells, consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra wells analyses

6.3 Statistical Analysis Results

Statistical analysis was completed by Jett Environmental Consultant. The results are included in **Appendix 4.**

Inorganics – Times Series & Trend Testing

Time Series graphs were generated for each of the inorganic constituents. The time series graphs are included in **Appendix 4 - Attachment 1**.

The inorganic constituents with results above the laboratory reporting limits were analyzed with Sanitas™ to determine if statistically significant increasing or decreasing trends exist within the background data range (January 2016 through May 2023) utilizing the Sen's Slope / Mann-Kendall trend test. Trends were based on a 98% confidence level (two tailed). The following constituents exhibited statistically significant increasing trends: boron (MW-5A), calcium (MW- 5A, MW-6A), chloride (MW-5, MW-5A, MW-6), sulfate (MW-5A, MW-6A), and total dissolved solids (MW-5A, MW-6A). Of the increasing trends, no instances were for an upgradient well. All other constituents were either not trending or had a statistically significant decreasing trend. The trending data have only been reviewed at this time. No trending data was removed before performing the inter-well prediction interval analysis. The trend testing results are included in **Appendix 4 - Attachment 2**.

Inorganics – Inter-Well Prediction Limits

Statistical Analysis was performed on the inorganic constituents and metals. Prediction interval analyses compare one or more observations to a limit set by background data. Background data

consists of semi-annual groundwater tests from the upgradient wells (MW-2, MW-3, and MW-7) between January 2016 and May 2023 (20 events). Interwell analyses compare observations from upgradient background wells and their relation to the observations for the downgradient wells. Intra-well analyses compare background observations to current observations of the same well.

Sanitas™ was used to perform the statistical analyses. For most constituents, non-parametric inter-well prediction intervals were performed due to non-detectable levels in more than 50 percent of the background samples or if data were not normally distributed. The Sanitas™ inter-well prediction limit outputs are included in **Appendix 4 - Attachment 3**.

Table 5 lists the parameters that exhibited a statistically significant increase (SSI) during the November 2025 sampling event, the associated monitoring wells, inter-well prediction limit, and the measured concentration. Also included on the table is a comparison to any established USEPA National Primary Drinking Water Standard – Maximum Contaminant Level (MCL).

Table 5
SSIs Observed During November 2025 Sampling Event

Constituent (units)	Well	Initial vs. Confirmed	Statistical Limit	Result	MCL
Boron (mg/L)	MW-5A	Confirmed	0.9	2.5	NE
pH (SU)	MW-5	Confirmed	5.22 - 6.98	7.23	NE
Total Dissolved Solids (mg/L)	MW-5A	Confirmed	3100	3300	NE
NE = Not Established.					
MCL = USEPA National Primary Drinking Water Standard - Maximum Contaminant Level					

Statistical Power Curves
A statistical power curve graph has been prepared to allow comparisons between the current monitoring program and USEPA-recommended standards. Under the USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (March 2009), inter-well prediction limits are constructed to have a site-wide false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. **Appendix 4 - Attachment 4** presents the power curves for the facility's monitoring program.

Results Summary
Boron (MW-5A), pH (MW-5), and total dissolved solids (MW-5A) exhibited confirmed SSIs during the November 2025 event.

No initial SSIs were exhibited during the November 2025 event.

Of the SSIs, none have an established MCL.

6.4 Results Interpretation
The November 2025 sampling results confirmed an interwell prediction exceedance for boron (MW-5A) and total dissolved solids (MW-5A). There are no current primary (health based) MCLs for boron or total dissolved solids. The facility will resample as part of the May 2026 sampling event.

There was a confirmed interwell prediction limit exceedance for pH in MW-5. This well will be resampled in May 2026.

The results of the interwell prediction limit statistical analysis of the November 2020 to November 2025 sampling events indicate a confirmed exceedance for Boron (MW-5A). EPA CCR Rule 40 CFR § 257.94(e)(2) allows an Alternative Source Demonstration (ASD) that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality for a constituent found in a monitoring well. This ASD was completed in April 2021 and placed in the operating record. The ASD found the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality instead of a release to groundwater.

The ASD theorized that this SSI was an issue with the location of the well rather than from a release from the facility. This alternative source demonstration confirmed that MW-5A may be impacted by its placement upgradient of a historic dewatering trench and cutoff trench. The ASD proposed a replacement well for MW-5A be installed downgradient of the dewatering trench and cutoff trench system. The new replacement well MW-5AR was installed prior to the May 2023 sampling event and the initial sampling results were compared to the existing MW-5A. Review of initial sampling results indicate that the theory may be correct. Monitoring of both MW-5A and MW-5AR will continue until the eight needed background samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease.

Based upon these findings the site will not need to move into the assessment monitoring program at this time and will continue with the detection monitoring program per the EPA CCR Rule (§ 257.94) on a semi-annual basis.

6.5 Proposed Actions

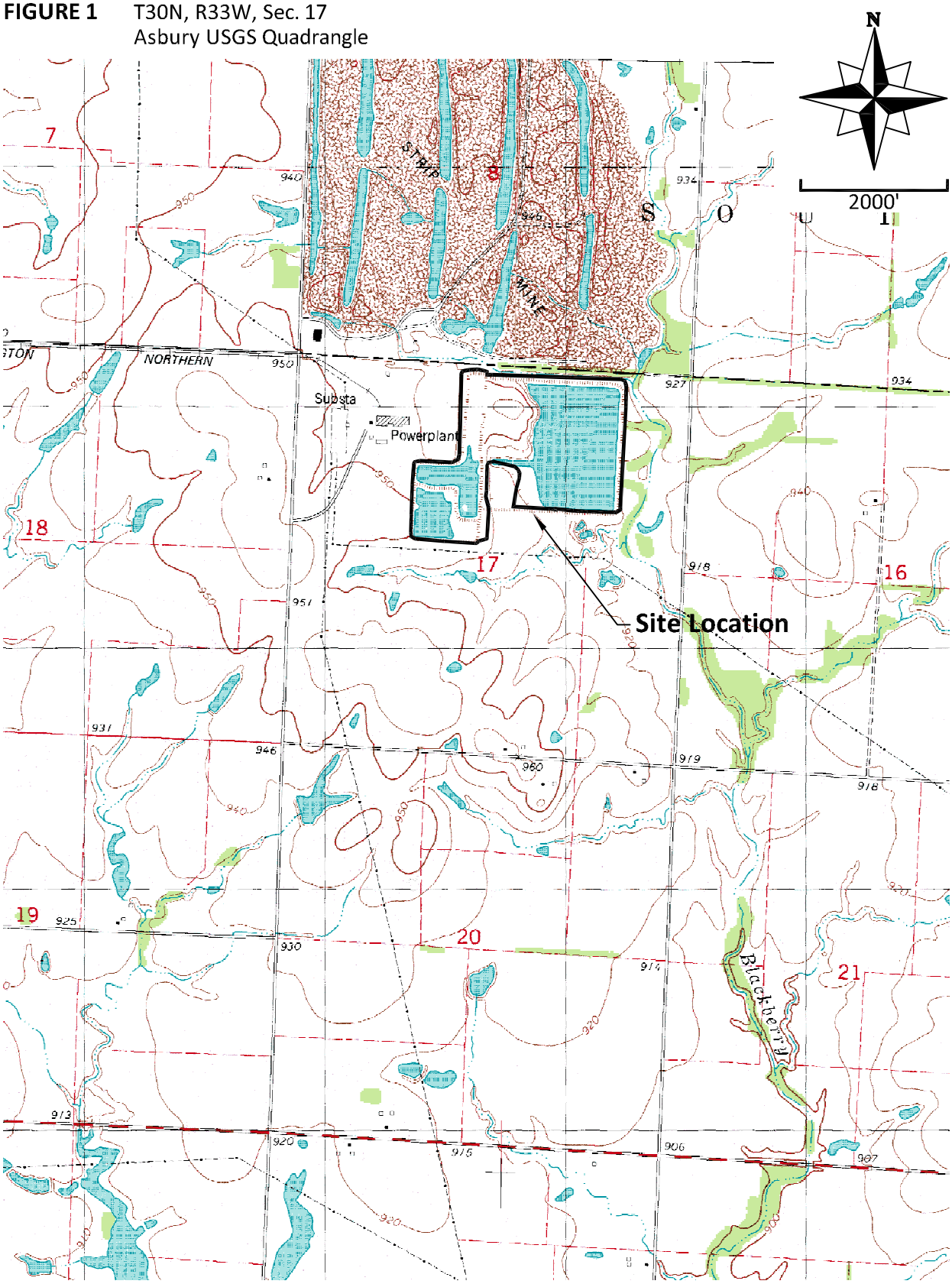
Groundwater sampling and statistical analysis will continue to be completed with interwell prediction limits per EPA's request. The results of the November 2026 sampling event confirmed the exceedance for Boron (MW-5A) and Total Dissolved Solids (MW-5A). Monitoring well MW-5AR was installed in response to the ASD. Monitoring of both MW-5A and MW-5AR will continue until the eight needed background samples are collected for MW-5AR and statistical analysis can begin. Sampling of MW-5A will then cease.

Based upon these findings the site does not need to move into the assessment monitoring program at this time and will continue with the detection monitoring program per the EPA CCR Rule (§ 257.94) on a semi-annual basis.

FIGURES

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event - November 2025
Site Location Map

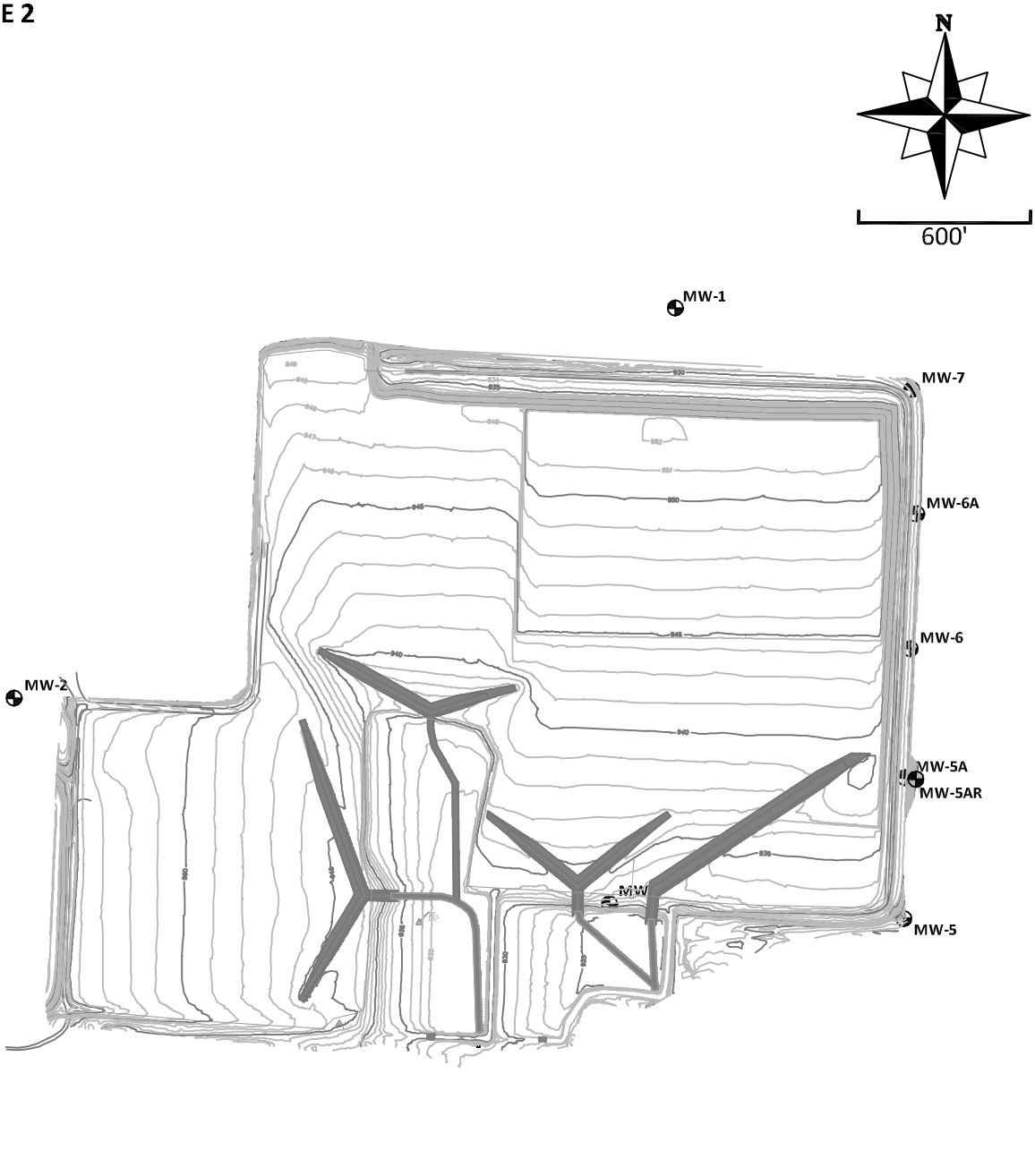
FIGURE 1 T30N, R33W, Sec. 17
Asbury USGS Quadrangle



January 2026

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event -November 2025
Groundwater Monitoring System

FIGURE 2



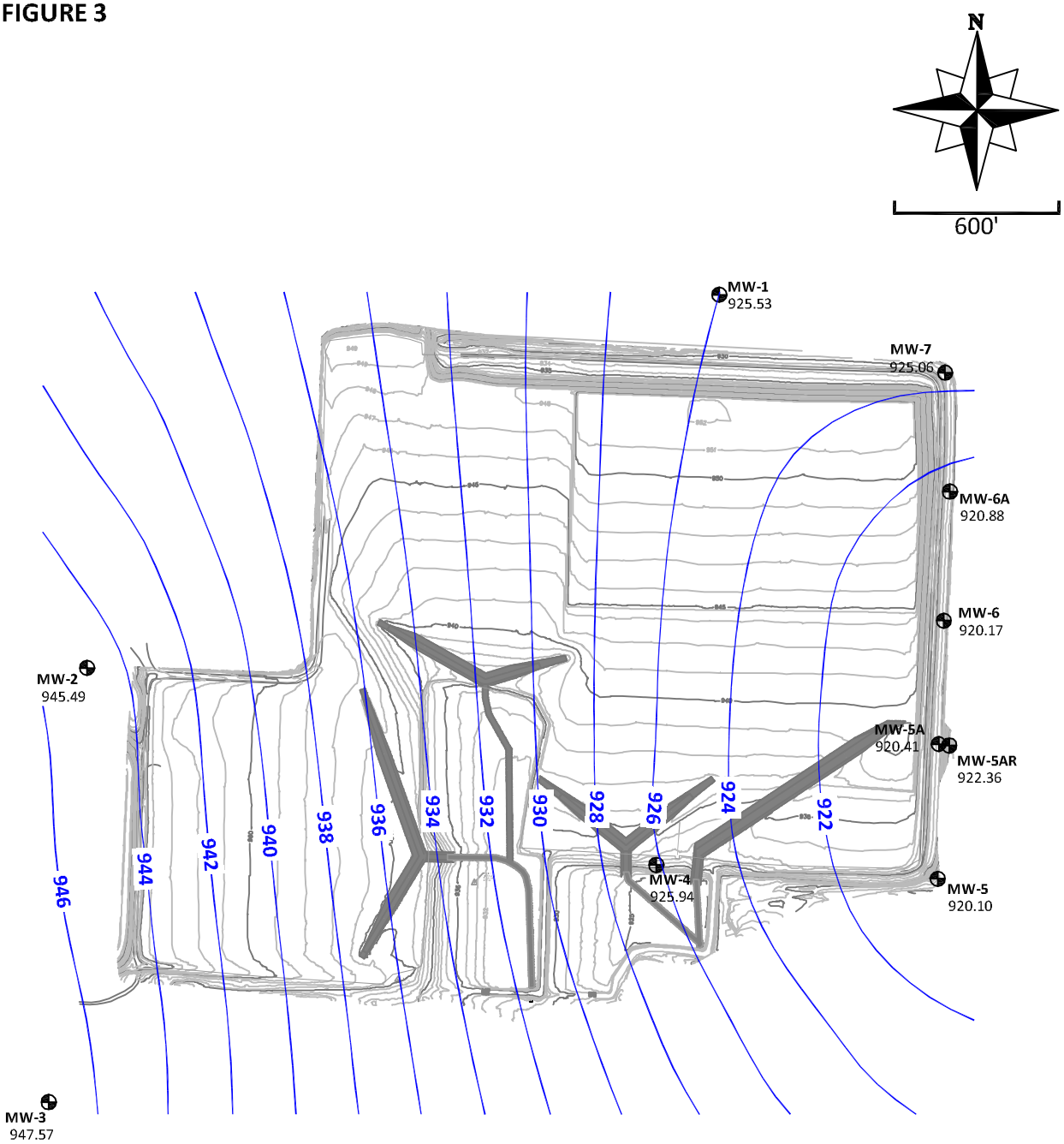
Well ID	Northing	Easting
MW-1	435789.71	2765168.83
MW-2	434428.56	2762861.43
MW-3	432844.71	2762721.27
MW-4	433709.70	2764938.79
MW-5	433659.19	2765966.39
MW-5A	434150.39	2765969.77
MW-5AR	434145.71	2766008.17
MW-6	434600.94	2765988.47
MW-6A	435071.72	2766010.58
MW-7	435505.31	2765993.01

Legend

Monitoring Well

Asbury Generating Station CCR Impoundment
Groundwater Sampling Event - November 2025
Groundwater Piezometric Surface Map

FIGURE 3



Well ID	Northing	Easting	Top of Casing	Static Water Level (BTOC)	Static Water Level
MW-1	435789.71	2765168.83	934.50	8.97	925.53
MW-2	434428.56	2762861.43	949.50	4.01	945.49
MW-3	432844.71	2762721.27	950.16	2.59	947.57
MW-4	433709.70	2764938.76	934.29	8.35	925.94
MW-5	433659.19	2765966.39	920.20	0.10	920.10
MW-5A	434150.39	2765969.77	929.76	9.35	920.41
MW-5AR	434145.71	2766008.17	923.92	1.56	922.36
MW-6	434600.94	2765988.47	929.85	9.68	920.17
MW-6A	435071.72	2766010.58	929.61	8.73	920.88
MW-7	435505.31	2765993.01	931.14	6.08	925.06

Legend

⊕ Monitoring Well

APPENDIX 1

EPA/MDNR Correspondence

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

NOV 02 2017

Mr. Kavan Stull, Senior Environmental Coordinator
Empire District
602 South Joplin Avenue
Joplin, MO 64802

RE: Site Characterization Workplan

Dear Mr. Stull:

The Missouri Department of Natural Resources has reviewed the document "Site Characterization Workplan" dated May 16, 2017. The site has undergone extensive characterization regarding construction of a coal combustion residual (CCR) landfill near the CCR impoundments. The department's Water Protection Program has determined, through consulting with the Missouri Geological Survey, this characterization is sufficient and may be used in whole to complete the required monitoring of the sub-surface conditions at the site. Additional submittal of site characterization is not necessary, as the previous submittal meets the requirement for special condition 19(b) of the Missouri State Operating Permit MO-0095362. The facility may proceed with the next step laid out in the permit; special condition 19(c). Enclosed is the Missouri Geological Survey concurrence.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to 10 CSR 20 1.020 and Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC is by mail at Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, by phone at 573-751-2422, by fax at 573-751-5018, and by website at www.oa.mo.gov/ahc.

If you have any questions, please do not hesitate to contact Ms. Pam Hackler by mail at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176, by phone at 573-526-3386; or by email at pam.hackler@dnr.mo.gov. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

Michael J. Abbott, Chief
Operating Permits Section

MJA/php

Enclosure

c: Mr. Randall Willoughby, Southwest Regional Office

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

MEMORANDUM

SWR18011
Jasper County

DATE: October 18, 2017

TO: Pam Hackler- WPP- Industrial Wastewater Unit

FROM: Fletcher N. Bone, Geologist, Environmental Geology Section, Geological Survey Program, MGS

Fletcher N. Bone

STATE OF MISSOURI
REGISTERED GEOLOGIST
2014000148
October 18, 2017

SUBJECT: Site characterization for existing CCR impoundments
Asbury Power Plant Site Characterization Work Plan- CCR
37 21 22.66 Latitude, -94 35 4.79 Longitude,
Jasper County, Missouri

The Missouri Geological Survey (MGS) has reviewed the documents titled, 'NPDES Permit MO-0095362 Asbury Power Plant, Jasper County, Missouri, Site Characterization Work Plan', prepared by Empire District Electric Company, dated September 8, 2017 and 'Site Characterization Work Plan, Coal Combustion Residuals Impoundments, Empire Electric Facility - Permit MO-0095362, Jasper County, Missouri, Geotechnology Project No. J021738.03', prepared by Geotechnology Inc., dated May 16, 2017. The MGS offers the following comment.

General Comment:

The MGS agrees that the existing Coal Combustion Residuals (CCR) impoundments (site 1) do not need further site characterization, at this time. The site characterization performed, as described in the Detailed Site Investigation Report (DSI), dated January 21, 2015, at the proposed CCR impoundment (site 2) that is approximately 1,000 feet south of the existing CCR impoundments (site 1), coupled with the geologic and hydrologic data provided that pertains to the existing CCR impoundments (site 1) (1996 to present data), provides adequate characterization of the geology and hydrology of the site 1. The geologic and hydrologic settings of both sites are similar, with geologic boring logs and potentiometric data of both sites being compared. The hydraulic conductivity testing conducted at the proposed CCR site (site 2) has demonstrated that there is a low potential for groundwater contamination for this area.

If you are in need of further assistance from our office or have questions regarding this evaluation please feel free to contact me at (573) 368-2161.

Drew Landoll

From: Snellen, Greg <greg.snellen@dnr.mo.gov>
Sent: Tuesday, January 21, 2020 3:34 PM
To: Drew Landoll
Cc: aston.robert@epa.gov; Nagel, Chris; Snellen, Greg
Subject: RE: EPA Request for Information regarding CCR Units

Good afternoon Drew,

The Environmental Protection Agency (EPA) has been working to verify data on facility specific CCR websites required by 40 CFR 257 at the national level. EPA headquarters provided a list of inquiries to the EPA regions and requested they work with the states to answer their questions. States were given a choice as to the amount of involvement they could have with the information gathering. Missouri elected to take the lead on contacting the facilities in the state, providing the information requested by the EPA and relaying the answers back.

For your company, the EPA has questions about facilities and units which may be seeking an extension under the alternate closure provisions in 2020 and what type of extension may be requested.

They provided the following list of units:

Region	State	Part A Extension	Plant Name	Unit Name	Unit Type	Op Status	Unit Class	NOI Type	NOI Date	Alterr NOI
7	MO		Asbury	Lower Pond	Surface Impoundment	Active	Existing			
7	MO		Asbury	Upper Pond	Surface Impoundment	Active	Existing			
7	MO		Asbury	South Pond	Surface Impoundment	Active	Existing			

EPA has requested a response on extensions by February 14, 2020.

Additionally, the EPA has the following question related to groundwater monitoring:

Facility	Location	Owner	Units	Geology	Problematic Use of Intra Well Comparisons	Problematic Alternate Source Determinations	Conclusions
Asbury Power Plant	Asbury MO	Empire District Electric Company	Upper Pond-unlined South Pond-unlined Lower Pond-unlined	Surficial unit of clay, clayey sand, and silt approximately 15 to 25 feet thick underlain by Warner Sandstone approximately 25-30 feet thick in the southern portion of the site and the Riverton Shale in the northern area of the site	Analytical results indicate consistent differences in contaminant concentrations between upgradient and downgradient wells. Consequently, inter well comparisons are feasible and would be preferable in the absence of compelling reasons to use intra well analysis		While there are no boring logs in the documents to confirm that the wells are screened in the same geologic unit, consistency in the field parameters and the description of the geology suggest that the wells are screened in the sandstone. The analytical results indicate consistent differences in contaminant concentrations

Facility	Location	Owner	Units	Geology	Problematic Use of Intra Well Comparisons	Problematic Alternate Source Determinations	Conclusions
							between upgradient and downgradient wells, consequently, interwell comparisons are feasible and would be preferable in the absence of compelling reasons to use intra wells analyses

At this time, there is not a deadline for this request.

Please let the Department know if you have any questions. You can also direct inquires to Bob Aston with EPA Region 7 who is copied on this email.

Thank you

Greg Snellen
Environmental Supervisor
Waste Management Program
573-526-8779

We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at https://www.surveymonkey.com/r/MoDNRsurvey. Thank you.

From: Aston, Robert
Sent: Friday, January 10, 2020 7:48 AM
To: Nagel, Chris <Christopher.Nagel@dnr.mo.gov>; Snellen, Greg <greg.snellen@dnr.mo.gov>
Cc: Martin, Mike <Martin.Mike@epa.gov>; Kloeckner, Jane <Kloeckner.Jane@epa.gov>; Catlin, Kelley <Catlin.Kelley@epa.gov>; Werner, Leslye <Werner.Leslye@epa.gov>; Hayworth, Brad <Hayworth.Brad@epa.gov>
Subject: CCR workload

Chris and Greg,

As a follow-up to our call on Wednesday

On Monday December 2, 2019 EPA published in the Federal Register a proposed rule for the Disposal of Coal Combustion Residuals From Electric Utilities: A Holistic Approach to Closure Part A: Deadline To Initiate Closure. The major elements of this proposed rule include:

- Definition of Lined Unit (removing a clay-lined unit from the definition),
- New initiation of Closure and Cease Receipt of Waste Deadline of August 31, 2020,
- New Alternate Closure Provisions for surface impoundment: Extensions to the initiation of closure

Nationally, EPA is gathering data to determine the number of facilities and units which may be seeking an extension under the alternate closure provisions in 2020 and is tasking the regions to work with our state partners and the facilities to determine the number of such facilities and units and what type of extension may be requested. Region 7 is seeking the state's assistance in gathering this information.

To be eligible for an extension the surface impoundment needs to be:

- An existing surface impoundment (eligible inactive surface impoundments should already be closing)
- An unlined or "clay-lined" surface impoundment
- Passed all location restrictions or only failed the uppermost aquifer restriction
  - Those that failed multiple location restrictions or did not post should have ceased receipt of waste in April 2019

This proposed rule offers facilities three options with regards to an extension

1.) Three month self-implementing extension (§ 257.103(e)(1)). Under this provision the surface impoundment must cease receipt of waste no later than November 30, 2020, and the facility must document certain conditions and certify "that the CCR and/or non-CCR waste streams must continue to be managed in that CCR surface impoundment to allow the facility to complete the measures necessary to provide alternative disposal capacity, either on-site or off-site of the facility" on its publicly available website no later than August 31, 2020.

2.) Site specific alternative to initiation of closure deadline due to lack of disposal capacity (§ 257.103(f)(1)). This provision allows facilities to submit demonstrations to EPA for approval for a specific amount of time to be able to continue to use their surface impoundment while developing alternate capacity for the CCR and non-CCR waste streams. This extension allows the facility to continue to use a unit (surface impoundment) for a maximum of 5 years, until October 15, 2023. Under this extension, facilities are required to submit their demonstrations to EPA no later than June 30, 2020.

3.) Site specific alternative to initiation of closure deadline due to Permanent Cessation of Coal Fired Boiler(s) by a Date Certain (§ 257.103(f)(2)): If a facility is ceasing generation of coal fired boiler(s) by a date certain, then the facility must complete closure by October 17, 2023 for surface impoundments less than 40 acres and by October 17, 2028 for surface impoundments larger than 40 acres. The facility is required to submit a demonstration to EPA for approval to continue to use their CCR surface impoundments. Under this extension, demonstrations are required to be submitted to EPA for approval no later than May 15, 2020.

As you can see above, the deadlines for requesting extensions are approaching quickly and will become effective when the proposed rule is final. EPA is requesting assistance from the regions, states, and facilities to estimate the number and types of extensions facility owners/operators may be requesting. EPA headquarters has developed a list (attached) of facilities which may be eligible for extensions by EPA Region and State. This list was developed by examining information included on individual facility web sites which are required as part of the CCR regulations. The list of potential sites in Missouri has been attached (attached Excel file) to this email. EPA headquarters has requested that individual regions reach out to their state counterparts to identify facility contacts and reach out to those contacts to determine which facilities and units may be requesting an extension and which type of extension may be requested. EPA headquarters has requested that this information be collected by February 14, 2020.

As part of the effort to determine what type of an extension a facility may need, EPA would also like the state's assistance in obtaining input regarding an estimate of the length of the extension that may be requested by the facility owners/operators. As part of the discussions, we need an estimate regarding the length of the extension. For example, EPA needs to estimate the following:

- Facilities that will not need an extension
- Facilities that will only need till November 2020 (short term extension)
- Longer than November – need about 6 months more
- Longer than November – need about 1 year
- Longer than November – need longer than 18 months

EPA is collecting this data in order to estimate the potential workload which could be associated with reviewing the above mentioned extension requests.

In addition, EPA headquarters routinely reviews the information posted on individual facility web sites. As part of that review EPA headquarters has identified sites in each region where specific facility information which is required to be posted is either missing, incomplete or technical questions exist. As part of this review EPA has developed two lists. See attached. One list deals with compliance issues related to documents which are, or in some cases are not, posted on the specific facility websites. The second list deals with groundwater questions related to Alternate Source Demonstrations and Intrawell analyses. With regards to the list dealing with compliance issues related to documents, EPA headquarters has requested that the regions work with their state counterparts to identify the appropriate facility contact. The plan is that EPA Headquarters would take the lead in coordination with the regions and states to contact the facilities to discuss and remedy the identified issues. With regards to the second list dealing with Alternate Source Demonstrations, EPA headquarters has requested that the regions work with their state counterparts to identify the appropriate facility contacts. The regions and or the states would then take the lead to address any identified issues. No specific timeframe has been established to address the questions related to either of the above lists. Region 7 anticipates working closely with the state in addressing these issues.

It should be noted that EPA headquarters routinely reviews CCR facility websites and could identify additional questions. If that should occur Region 7 would again reach out to the states.

At your convenience I would like to follow-up with you on the above issues sometime next week to discuss Missouri's perspective and any comments you may have. If you have any questions please do not hesitate to call or email me.

Thanks

Bob Aston
USEPA Region 7
(913)551-7392

APPENDIX 2

Monitoring Well Field Inspection Sheets and Field Notes

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 2

Sample [X] **Blind Duplicate** [ ] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2000 mL post pump calibration.

Date / Time Initiated: 11-6-25 @ 8:20

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
8:24	200	800	16.8	6.36	1.245	1.53	37.9	44.71	clear
:26		1200	16.9	6.32	1.169	0.85	23.6	57.18	
:28		1600	16.9	6.23	1.018	0.74	20.2	41.29	
:30	↓	2000	16.9	6.15	0.864	0.69	20.1	31.23	↓

Time sampled 8:30

Weather Conditions Cloudy, 55°F

Water Level Start 4.01'

Water Level Finish 5.96'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 3

Sample ☐ **Blind Duplicate** ☐ **Field Blank** ☐.

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration .

Date / Time Initiated: ~~10/~~11-5-25 @ 10:45

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
10:47	200	400	17.6	5.76	1.116	1.08	100.4	31.51	clear
:49	↓	800	17.3	5.77	1.116	0.67	86.8	90.58	↓
:51		1200	17.3	5.78	1.116	0.62	83.8	134.27	
:53	↓	1600	17.3	5.78	1.115	0.56	80.8	269.21	↓

Time sampled 10:55

Weather Conditions Sunny, 60°F

Water Level Start 2.59'

Water Level Finish 2.65'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	(N)	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 4

Sample [X] **Blind Duplicate** [ ] **Field Blank** [X]

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1800 mL post pump calibration .

Date / Time Initiated: 11-6-25 @ 9:06

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
9:09	200	600	17.0	6.64	0.771	1.45	29.9	23.52	Clear
:11	↓	1000	17.0	6.61	0.784	0.94	33.3	19.32	↓
:13	↓	1400	17.1	6.61	0.784	0.83	35.1	19.06	↓
:15	↓	1800	17.2	6.61	0.784	0.78	36.1	19.13	↓

Time sampled 9:15 / 9:20

Weather Conditions Cloudy, 55°F

Water Level Start 8.35

Water Level Finish 13.79'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 05

Sample [X] **Blind Duplicate** [X] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1800 mL post pump calibration .

Date / Time Initiated: 11-6-25 @ 9:50

Well Purged To Dryness?: Y / N Gas Detected? Y / N

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
9:53	200	600	16.9	7.25	0.827	1.11	63.3	16.25	Cloudy
:55	↓	1000	17.1	7.25	0.825	0.74	44.7	21.97	↓
:57		1400	17.1	7.24	0.824	0.62	35.2	18.72	
:59	✓	1800	17.2	7.23	0.824	0.55	27.7	19.86	✓

Time sampled 10:00 / 10:15 Duplicate

Weather Conditions Cloudy, 55°F

Water Level Start 0:10'

Water Level Finish 10.17'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 5A

Sample ☒ **Blind Duplicate** ☐ **Field Blank** ☐.

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2400 mL post pump calibration.

Date / Time Initiated: 11-5-25 @ 11:55

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
12:01	200	1200	18.9	6.63	3.512	1.58	126.4	15.90	clear
:04	↓	1600	18.8	6.62	3.512	0.94	130.7	22.41	↓
:05	↓	2000	18.9	6.61	3.510	0.75	131.8	32.21	↓
:07	↓	2400	18.9	6.61	3.507	0.66	131.6	45.10	↓

Time sampled 12:10

Weather Conditions Sunny, 70°F

Water Level Start 9.35'

Water Level Finish 17.42'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	(Y)	N	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 5AR

Sample [X] **Blind Duplicate** [ ] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration .

Date / Time Initiated: 11-5-25 @ 11:29

Well Purged To Dryness?: Y (N) Gas Detected? Y (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (mL)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity ( )	Other (Color, Clarity, Odor)
11:31	200	400	18.9	7.43	1.123	6.15	74.1	91.86	clear
:33		800	18.8	7.45	1.123	6.10	73.0	6.31	
:35		1200	18.8	7.46	1.123	6.06	73.0	7.14	
:37	↓	1600	18.8	7.46	1.124	6.05	73.4	7.44	↓

Time sampled 11:40

Weather Conditions Sunny, 65°F

Water Level Start 1.56'

Water Level Finish 10.42'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Previous 6 month Event Data

Data Information	Units	MW- 1	MW-2	MW-3	MW-4	MW-5	MW-5A	MW-5-AR
pH	S.U.	NO TEST	5.67	5.83	6.47	7.28	6.77	7.00
Specific Conductance	mS/cm	GW	0.691	1.258	1.189	0.936	3.983	1.403
Total Well Depth from TOC	ft	Level						
Previous GW Depth TOC	ft	Only	3.83	1.57	7.96	2.51	10.30	3.40
		DON'T SAMPLE						

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 6

Sample [X] **Blind Duplicate** [ ] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1600 mL post pump calibration.

Date / Time Initiated: 11-5-25 @ 12:44

Well Purged To Dryness?: Y / (N) Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
12:46	200	400	17.8	6.93	2.126	1.46	93.3	35.25	Clear
:49	↓	800	17.8	6.92	2.125	0.73	95.3	87.27	↓
:50		1200	17.7	6.92	2.119	0.61	95.3	156.25	
:52	✓	1600	17.6	6.92	2.120	0.58	95.2	79.60	

Time sampled 12:55

Weather Conditions Sunny, 70°F

Water Level Start 9.68'

Water Level Finish 18.76'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	7.06	6.65	6.30					
Specific Conductance	mS/cm	2.376	2.528	2.926					
Total Well Depth from TOC	ft								
Previous GW Depth TOC	ft	9.18	8.28	4.04					

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)** Monitoring Well ID: **MW-** 6A

Sample [X] **Blind Duplicate** [ ] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 2000 mL post pump calibration.

Date / Time Initiated: 10-5-25 @ 11:20

Well Purged To Dryness?: Y (N) Gas Detected? Y (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
1:24	200	800	19.2	6.40	2.157	0.96	79.9	24.54	Clear
26	↓	1200	19.2	6.39	2.156	0.68	65.5	20.86	↓
28		1600	19.1	6.39	2.150	0.58	55.8	29.13	
30	↓	2000	19.2	6.39	2.150	0.52	51.4	34.81	

Time sampled 1:30

Weather Conditions Sunny, 70°F

Water Level Start 8.79'

Water Level Finish 17.31'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	G	F	P
Pad Condition	G	F	P
Casing Condition	G	F	P
Locking Cap & Lock	G	F	P
Riser Condition	G	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	Y	N	N/A
Standing Water	Y	N	N/A
Clear of Weeds	Y	N	N/A
Measuring Point	Y	N	N/A
Split sample with MDNR	Y	N	N/A
Maintenance Performed	Y	N	N/A
Decontamination Normal	Y	N	N/A
Equipment Calibration Normal	Y	N	N/A
Redevelopment Needed	Y	N	N/A
Any deviations from SAP	Y	N	N/A
Sediment Thickness Checked	Y	N	N/A

Previous 6 month Event Data

Data Information	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	7.06	6.65	6.30					
Specific Conductance	mS/cm	2.376	2.528	2.926					
Total Well Depth from TOC	ft								
Previous GW Depth TOC	ft	9.18	8.28	4.04					

MW-1 8.97'

2025 Field Sampling Log

Facility: Asbury CCR **(No Permit # as of this date)**

Monitoring Well ID: **MW-7**

Sample [X] **Blind Duplicate** [ ] **Field Blank** [ ].

Purge Information:

Method of Well Purge: **Peristaltic Pump with 3/8 - inch Diameter Tubing**

Actual Purge Volume Removed: 1800 mL post pump calibration.

Date / Time Initiated: 11-5-25 @ 2:00

Well Purged To Dryness?: Y / (N)

Gas Detected? Y / (N)

Purge Data:

Time	Purge Rate (mL/min)	Cumulative Volume (ml)	Temp. (°C)	pH (SU)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (MV)	Turbidity (NTU)	Other (Color, Clarity, Odor)
2:03	200	600	19.9	6.27	2.626	2.69	24.7	7.47	Clear
:05		1000	18.7	6.28	2.633	1.93	16.6	5.53	
:07		1400	18.6	6.28	2.634	1.65	14.6	5.84	
:09	✓	1800	18.4	6.28	2.638	1.52	13.8	4.78	✓

Time sampled 2:15

Weather Conditions Sunny, 70°F

Water Level Start 6.09'

Water Level Finish 6.21'

Name (MEC Field Sampler): Ryan Ortbals and Rick Elgin

Sampler Signature

Field Inspection	Good	Fair	Poor
Access	(G)	F	P
Pad Condition	(G)	F	P
Casing Condition	(G)	F	P
Locking Cap & Lock	(G)	F	P
Riser Condition	(G)	F	P

Field Inspection	Yes	No	N/A
Well ID Visible	(Y)	N	N/A
Standing Water	Y	(N)	N/A
Clear of Weeds	(Y)	N	N/A
Measuring Point	(Y)	N	N/A
Split sample with MDNR	Y	(N)	N/A
Maintenance Performed	Y	(N)	N/A
Decontamination Normal	(Y)	N	N/A
Equipment Calibration Normal	(Y)	N	N/A
Redevelopment Needed	Y	(N)	N/A
Any deviations from SAP	Y	(N)	N/A
Sediment Thickness Checked	Y	(N)	N/A

Previous 6 month Event Data

Data Information	Units	MW- 6	MW- 6A	MW-7					
pH	S.U.	7.06	6.65	6.30					
Specific Conductance	mS/cm	2.376	2.528	2.926					
Total Well Depth from TOC	ft								
Previous GW Depth TOC	ft	9.18	8.28	4.04					

APPENDIX 3

Analytical Results

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13

ANALYTICAL REPORT

PREPARED FOR

Attn: Lindsey Henry
Midwest Environmental Consultants
2009 East McCarty Street
Suite 2
Jefferson City, Missouri 65101

Generated 12/9/2025 11:19:14 AM

JOB DESCRIPTION

Asbury Pond CCR

JOB NUMBER

180-198209-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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12/9/2025 11:19:14 AM

Authorized for release by
Gail Lage, Senior Project Manager
Gail.Lage@et.eurofinsus.com
(615)301-5741

Table of Contents

Job Narrative
180-198209-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/7/2025 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.6°C, 3.7°C, 3.9°C and 4.5°C.

HPLC/IC
Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: MW-3 (180-198209-2), MW-5A (180-198209-5), MW-5AR (180-198209-6), MW-6 (180-198209-7), MW-6A (180-198209-8) and MW-7 (180-198209-9). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The following sample was diluted due to the nature of the sample matrix: MW-4 (180-198209-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
Method 9320_Ra228: Radium 228 Batch 744955

The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 126%: (LCS 160-744955/2-A). The limits in our LIMS system at 75-125% reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 68-154%. The LCS is within criteria and no further action is required.

Method 9320_Ra228: Radium 228 Batch 744955

The matrix spike duplicate (MSD) recovery for 160-744955 was outside control limits. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. (280-216575-C-1-D MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	2891	04-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-30-26
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Cedar Falls

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-26
Georgia	State	IA100001 (OR)	09-29-26
Illinois	NELAP	200024	11-30-26
Iowa	State	007	12-01-25
Kansas	NELAP	E-10341	01-31-26
Minnesota	NELAP	019-999-319	12-31-25
Minnesota (Petrofund)	State	3349	01-18-26
North Dakota	State	R-186	09-29-24 *
Oregon	NELAP	IA100001	09-29-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25 *
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-26
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-198209-1	MW-2	Water	11/06/25 08:30	11/07/25 08:30	Missouri
180-198209-2	MW-3	Water	11/05/25 10:55	11/07/25 08:30	Missouri
180-198209-3	MW-4	Water	11/06/25 09:15	11/07/25 08:30	Missouri
180-198209-4	MW-5	Water	11/06/25 10:00	11/07/25 08:30	Missouri
180-198209-5	MW-5A	Water	11/05/25 12:10	11/07/25 08:30	Missouri
180-198209-6	MW-5AR	Water	11/05/25 11:40	11/07/25 08:30	Missouri
180-198209-7	MW-6	Water	11/05/25 12:55	11/07/25 08:30	Missouri
180-198209-8	MW-6A	Water	11/05/25 01:30	11/07/25 08:30	Missouri
180-198209-9	MW-7	Water	11/05/25 02:15	11/07/25 08:30	Missouri
180-198209-10	DUPLICATE (AT MW-5)	Water	11/06/25 10:15	11/07/25 08:30	Missouri
180-198209-11	FIELD BLANK	Water	11/06/25 09:20	11/07/25 08:30	Missouri

Method Summary

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
EPA 6020B	Metals (ICP/MS)	SW846	EET CF
EPA 7470A	Mercury (CVAA)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Field Sampling	Field Sampling	EPA	EET PIT
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Client Sample ID: MW-2
Lab Sample ID: 180-198209-1

Date Collected: 11/06/25 08:30
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/11/25 21:55	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 16:46	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 14:42	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/06/25 09:30	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-3
Lab Sample ID: 180-198209-2

Date Collected: 11/05/25 10:55
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/11/25 22:09	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		5	1 mL	1 mL	506165	11/11/25 22:24	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 16:49	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 14:45	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 11:55	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-4
Lab Sample ID: 180-198209-3

Date Collected: 11/06/25 09:15
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/11/25 22:38	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		2	1 mL	1 mL	506237	11/13/25 00:50	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 16:52	NFT2	EET CF
	Instrument ID: ICPMS7850									

Lab Chronicle

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-4
Lab Sample ID: 180-198209-3
Date Collected: 11/06/25 09:15
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 14:48	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/06/25 10:15	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5
Lab Sample ID: 180-198209-4
Date Collected: 11/06/25 10:00
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/11/25 22:53	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 16:55	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 14:50	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/06/25 11:00	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5A
Lab Sample ID: 180-198209-5
Date Collected: 11/05/25 12:10
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		2.5	1 mL	1 mL	506165	11/11/25 23:07	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		25	1 mL	1 mL	506165	11/11/25 23:22	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		4			473514	11/13/25 15:47	NFT2	EET CF
	Instrument ID: ICPMS7800									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		4			474056	11/18/25 15:02	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 13:10	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-5AR
Lab Sample ID: 180-198209-6

Date Collected: 11/05/25 11:40
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/12/25 00:05	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		5	1 mL	1 mL	506165	11/12/25 00:20	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474530	11/21/25 16:09	ZRI4	EET CF
	Instrument ID: ICPMS7800									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 17:06	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 15:05	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	7470A			30 mL	40 mL	473581	11/14/25 13:00	RLT9	EET CF
Total/NA	Analysis	EPA 7470A		1			473705	11/15/25 13:05	RLT9	EET CF
	Instrument ID: Juliet									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.88 mL	1.0 g	744951	11/12/25 08:29	VLQ	EET SL
Total/NA	Analysis	9315		1			748060	12/05/25 15:09	SWS	EET SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.88 mL	1.0 g	744955	11/12/25 08:35	VLQ	EET SL
Total/NA	Analysis	9320		1			747901	12/04/25 12:27	SWS	EET SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			748462	12/08/25 18:05	CMM	EET SL
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 12:40	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-6
Lab Sample ID: 180-198209-7

Date Collected: 11/05/25 12:55
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/12/25 00:34	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	506165	11/12/25 00:49	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 17:09	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 15:08	NFT2	EET CF
	Instrument ID: ICPMS7850									

Client Sample ID: MW-6
Lab Sample ID: 180-198209-7

Date Collected: 11/05/25 12:55
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 13:55	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-6A
Lab Sample ID: 180-198209-8

Date Collected: 11/05/25 01:30
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/12/25 01:03	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		10	1 mL	1 mL	506165	11/12/25 01:18	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 17:12	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		7			474056	11/18/25 15:10	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 02:30	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: MW-7
Lab Sample ID: 180-198209-9

Date Collected: 11/05/25 02:15
Matrix: Water
Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		2.5	1 mL	1 mL	506165	11/12/25 02:16	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		25	1 mL	1 mL	506165	11/12/25 03:00	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		4			473514	11/13/25 15:57	NFT2	EET CF
	Instrument ID: ICPMS7800									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		4			474056	11/18/25 15:13	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/05/25 03:15	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUPLICATE (AT MW-5)

Lab Sample ID: 180-198209-10

Date Collected: 11/06/25 10:15

Matrix: Water

Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/12/25 03:14	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 17:18	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 15:16	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			506493	11/06/25 11:15	FDS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FIELD BLANK

Lab Sample ID: 180-198209-11

Date Collected: 11/06/25 09:20

Matrix: Water

Date Received: 11/07/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	506165	11/12/25 01:33	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			473366	11/12/25 17:20	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Prep	3005A			50 mL	50 mL	473181	11/12/25 09:00	RLT9	EET CF
Total/NA	Analysis	EPA 6020B		1			474056	11/18/25 15:19	NFT2	EET CF
	Instrument ID: ICPMS7850									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	506186	11/11/25 13:59	A1K	EET PIT
	Instrument ID: NOEQUIP									

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Client: Midwest Environmental Consultants
Project/Site: Asbury Pond CCR

Job ID: 180-198209-2

Analyst References:

Lab: EET CF
- Batch Type: Prep
  - RLT9 = David Green
- Batch Type: Analysis
  - NFT2 = Tyler Chettinger
  - RLT9 = David Green
  - ZRI4 = Christopher Britt

Lab: EET PIT
- Batch Type: Analysis
  - A1K = Agnes Komlos
  - ERP = Evan Papak
  - FDS = Sampler Field

Lab: EET SL
- Batch Type: Prep
  - VLQ = Valerie Quevreaux
- Batch Type: Analysis
  - CMM = Chelsea Mazariegos
  - SWS = Seth Stubblefield

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-2
Lab Sample ID: 180-198209-1

Date Collected: 11/06/25 08:30
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		1.0	0.71	mg/L			11/11/25 21:55	1
Fluoride	0.19		0.10	0.026	mg/L			11/11/25 21:55	1
Sulfate	120		1.0	0.76	mg/L			11/11/25 21:55	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		100	82	ug/L		11/12/25 09:00	11/18/25 14:42	1
Calcium	35000		500	190	ug/L		11/12/25 09:00	11/12/25 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	430		10	10	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.15				SU			11/06/25 09:30	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-3
Lab Sample ID: 180-198209-2
Date Collected: 11/05/25 10:55
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		1.0	0.71	mg/L			11/11/25 22:09	1
Fluoride	0.11		0.10	0.026	mg/L			11/11/25 22:09	1
Sulfate	520		5.0	3.8	mg/L			11/11/25 22:24	5

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		11/12/25 09:00	11/18/25 14:45	1
Calcium	100000		500	190	ug/L		11/12/25 09:00	11/12/25 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	910		10	10	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.78				SU			11/05/25 11:55	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-4
Lab Sample ID: 180-198209-3

Date Collected: 11/06/25 09:15
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		1.0	0.71	mg/L			11/11/25 22:38	1
Fluoride	0.21		0.10	0.026	mg/L			11/11/25 22:38	1
Sulfate	250		2.0	1.5	mg/L			11/13/25 00:50	2

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		100	82	ug/L		11/12/25 09:00	11/18/25 14:48	1
Calcium	85000		500	190	ug/L		11/12/25 09:00	11/12/25 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	520		10	10	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.61				SU			11/06/25 10:15	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-5
Lab Sample ID: 180-198209-4

Date Collected: 11/06/25 10:00
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		1.0	0.71	mg/L			11/11/25 22:53	1
Fluoride	0.28		0.10	0.026	mg/L			11/11/25 22:53	1
Sulfate	150		1.0	0.76	mg/L			11/11/25 22:53	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100	82	ug/L		11/12/25 09:00	11/18/25 14:50	1
Calcium	91000		500	190	ug/L		11/12/25 09:00	11/12/25 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	580		10	10	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.23				SU			11/06/25 11:00	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-5A
Lab Sample ID: 180-198209-5

Date Collected: 11/05/25 12:10
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		2.5	1.8	mg/L			11/11/25 23:07	2.5
Fluoride	0.27		0.25	0.065	mg/L			11/11/25 23:07	2.5
Sulfate	2000		25	19	mg/L			11/11/25 23:22	25

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		400	330	ug/L		11/12/25 09:00	11/18/25 15:02	4
Calcium	480000		2000	760	ug/L		11/12/25 09:00	11/13/25 15:47	4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3300		40	40	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.61				SU			11/05/25 13:10	1

Client Sample ID: MW-5AR
Lab Sample ID: 180-198209-6
Date Collected: 11/05/25 11:40
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.2**		1.0	0.71	mg/L			11/12/25 00:05	1
Fluoride	**0.23**		0.10	0.026	mg/L			11/12/25 00:05	1
Sulfate	**410**		5.0	3.8	mg/L			11/12/25 00:20	5

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	1.0	ug/L		11/12/25 09:00	11/21/25 16:09	1
Arsenic	ND		2.0	0.53	ug/L		11/12/25 09:00	11/12/25 17:06	1
Barium	**13**		2.0	0.66	ug/L		11/12/25 09:00	11/12/25 17:06	1
Beryllium	ND		1.0	0.33	ug/L		11/12/25 09:00	11/12/25 17:06	1
Boron	**420**		100	82	ug/L		11/12/25 09:00	11/18/25 15:05	1
Cadmium	ND		0.20	0.10	ug/L		11/12/25 09:00	11/12/25 17:06	1
Calcium	**110000**		500	190	ug/L		11/12/25 09:00	11/12/25 17:06	1
Chromium	ND		5.0	1.8	ug/L		11/12/25 09:00	11/12/25 17:06	1
Cobalt	ND		0.50	0.17	ug/L		11/12/25 09:00	11/12/25 17:06	1
Lead	ND		0.50	0.33	ug/L		11/12/25 09:00	11/12/25 17:06	1
Lithium	**120**		10	2.9	ug/L		11/12/25 09:00	11/12/25 17:06	1
Molybdenum	ND		2.0	1.3	ug/L		11/12/25 09:00	11/12/25 17:06	1
Selenium	ND		5.0	1.4	ug/L		11/12/25 09:00	11/12/25 17:06	1
Thallium	ND		1.0	0.57	ug/L		11/12/25 09:00	11/12/25 17:06	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00011	mg/L		11/14/25 13:00	11/15/25 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**900**		10	10	mg/L			11/11/25 13:59	1

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.946**		0.291	0.304	1.00	0.287	pCi/L	11/12/25 08:29	12/05/25 15:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*30 - 110*	*11/12/25 08:29*	*12/05/25 15:09*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.39**		0.618	0.631	1.00	0.859	pCi/L	11/12/25 08:35	12/04/25 12:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*30 - 110*	*11/12/25 08:35*	*12/04/25 12:27*	*1*
Y Carrier	*78.1*		*30 - 110*	*11/12/25 08:35*	*12/04/25 12:27*	*1*

Client: Midwest Environmental Consultants
Project/Site: Asbury Pond CCR

Job ID: 180-198209-2

Client Sample ID: MW-5AR
Date Collected: 11/05/25 11:40
Date Received: 11/07/25 08:30

Lab Sample ID: 180-198209-6
Matrix: Water

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.34		0.683	0.700	5.00	0.859	pCi/L		12/08/25 18:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.46				SU			11/05/25 12:40	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-6
Lab Sample ID: 180-198209-7

Date Collected: 11/05/25 12:55
Matrix: Water

Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34		1.0	0.71	mg/L			11/12/25 00:34	1
Fluoride	0.25		0.10	0.026	mg/L			11/12/25 00:34	1
Sulfate	1100		10	7.6	mg/L			11/12/25 00:49	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	450		100	82	ug/L		11/12/25 09:00	11/18/25 15:08	1
Calcium	290000		500	190	ug/L		11/12/25 09:00	11/12/25 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2000		20	20	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.92				SU			11/05/25 13:55	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-6A
Lab Sample ID: 180-198209-8

Date Collected: 11/05/25 01:30
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70		1.0	0.71	mg/L			11/12/25 01:03	1
Fluoride	0.17		0.10	0.026	mg/L			11/12/25 01:03	1
Sulfate	1200		10	7.6	mg/L			11/12/25 01:18	10

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		700	570	ug/L		11/12/25 09:00	11/18/25 15:10	7
Calcium	240000		500	190	ug/L		11/12/25 09:00	11/12/25 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2000		20	20	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.38				SU			11/05/25 02:30	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: MW-7
Lab Sample ID: 180-198209-9

Date Collected: 11/05/25 02:15
Matrix: Water
Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37		2.5	1.8	mg/L			11/12/25 02:16	2.5
Fluoride	0.19	J	0.25	0.065	mg/L			11/12/25 02:16	2.5
Sulfate	1800		25	19	mg/L			11/12/25 03:00	25

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		400	330	ug/L		11/12/25 09:00	11/18/25 15:13	4
Calcium	500000		2000	760	ug/L		11/12/25 09:00	11/13/25 15:57	4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2800		20	20	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.28				SU			11/05/25 03:15	1

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Client Sample ID: DUPLICATE (AT MW-5)

Lab Sample ID: 180-198209-10

Date Collected: 11/06/25 10:15

Matrix: Water

Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		1.0	0.71	mg/L			11/12/25 03:14	1
Fluoride	0.27		0.10	0.026	mg/L			11/12/25 03:14	1
Sulfate	150		1.0	0.76	mg/L			11/12/25 03:14	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	330		100	82	ug/L		11/12/25 09:00	11/18/25 15:16	1
Calcium	92000		500	190	ug/L		11/12/25 09:00	11/12/25 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	590		10	10	mg/L			11/11/25 13:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.23				SU			11/06/25 11:15	1

Client: Midwest Environmental Consultants
Project/Site: Asbury Pond CCR

Job ID: 180-198209-2

Client Sample ID: FIELD BLANK

Lab Sample ID: 180-198209-11

Date Collected: 11/06/25 09:20

Matrix: Water

Date Received: 11/07/25 08:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.1		1.0	0.71	mg/L			11/12/25 01:33	1
Fluoride	0.52		0.10	0.026	mg/L			11/12/25 01:33	1
Sulfate	1.9		1.0	0.76	mg/L			11/12/25 01:33	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		11/12/25 09:00	11/18/25 15:19	1
Calcium	21000		500	190	ug/L		11/12/25 09:00	11/12/25 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	170		10	10	mg/L			11/11/25 13:59	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-506165/37
Matrix: Water
Analysis Batch: 506165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			11/11/25 19:58	1
Fluoride	ND		0.10	0.026	mg/L			11/11/25 19:58	1
Sulfate	ND		1.0	0.76	mg/L			11/11/25 19:58	1

Lab Sample ID: LCS 180-506165/38
Matrix: Water
Analysis Batch: 506165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	48.5		mg/L		97	80 - 120		
Fluoride			2.50	2.60		mg/L		104	80 - 120		
Sulfate			50.0	50.0		mg/L		100	80 - 120		

Lab Sample ID: 180-198209-11 MS
Matrix: Water
Analysis Batch: 506165

Client Sample ID: FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	7.1		50.0	54.9		mg/L		96	80 - 120		
Fluoride	0.52		2.50	3.03		mg/L		100	80 - 120		
Sulfate	1.9		50.0	51.8		mg/L		100	80 - 120		

Lab Sample ID: 180-198209-11 MSD
Matrix: Water
Analysis Batch: 506165

Client Sample ID: FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.1		50.0	54.9		mg/L		96	80 - 120	0	15
Fluoride	0.52		2.50	3.03		mg/L		100	80 - 120	0	15
Sulfate	1.9		50.0	51.6		mg/L		99	80 - 120	0	15

Lab Sample ID: MB 180-506237/55
Matrix: Water
Analysis Batch: 506237

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			11/12/25 22:54	1
Fluoride	ND		0.10	0.026	mg/L			11/12/25 22:54	1
Sulfate	ND		1.0	0.76	mg/L			11/12/25 22:54	1

Lab Sample ID: LCS 180-506237/56
Matrix: Water
Analysis Batch: 506237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.2		mg/L		100	80 - 120		
Fluoride			2.50	2.72		mg/L		109	80 - 120		
Sulfate			50.0	51.7		mg/L		103	80 - 120		

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-198298-E-1 MS
Matrix: Water
Analysis Batch: 506237

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.96	J	50.0	50.4		mg/L		99	80 - 120
Fluoride	ND		2.50	2.66		mg/L		106	80 - 120
Sulfate	4.7		50.0	55.4		mg/L		101	80 - 120

Lab Sample ID: 180-198298-E-1 MSD
Matrix: Water
Analysis Batch: 506237

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	0.96	J	50.0	50.2		mg/L		99	80 - 120	0	15
Fluoride	ND		2.50	2.65		mg/L		106	80 - 120	0	15
Sulfate	4.7		50.0	55.2		mg/L		101	80 - 120	0	15

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-473181/1-A
Matrix: Water
Analysis Batch: 473366

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.53	ug/L		11/12/25 09:00	11/12/25 16:40	1
Barium	ND		2.0	0.66	ug/L		11/12/25 09:00	11/12/25 16:40	1
Beryllium	ND		1.0	0.33	ug/L		11/12/25 09:00	11/12/25 16:40	1
Cadmium	ND		0.20	0.10	ug/L		11/12/25 09:00	11/12/25 16:40	1
Calcium	ND		500	190	ug/L		11/12/25 09:00	11/12/25 16:40	1
Chromium	ND		5.0	1.8	ug/L		11/12/25 09:00	11/12/25 16:40	1
Cobalt	ND		0.50	0.17	ug/L		11/12/25 09:00	11/12/25 16:40	1
Lead	ND		0.50	0.33	ug/L		11/12/25 09:00	11/12/25 16:40	1
Lithium	ND		10	2.9	ug/L		11/12/25 09:00	11/12/25 16:40	1
Molybdenum	ND		2.0	1.3	ug/L		11/12/25 09:00	11/12/25 16:40	1
Selenium	ND		5.0	1.4	ug/L		11/12/25 09:00	11/12/25 16:40	1
Thallium	ND		1.0	0.57	ug/L		11/12/25 09:00	11/12/25 16:40	1

Lab Sample ID: MB 310-473181/1-A
Matrix: Water
Analysis Batch: 473514

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		11/12/25 09:00	11/13/25 15:24	1

Lab Sample ID: MB 310-473181/1-A
Matrix: Water
Analysis Batch: 474056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	82	ug/L		11/12/25 09:00	11/18/25 14:36	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-473181/1-A
Matrix: Water
Analysis Batch: 474530

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	1.0	ug/L		11/12/25 09:00	11/21/25 15:46	1

Lab Sample ID: LCS 310-473181/2-A
Matrix: Water
Analysis Batch: 473366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	185		ug/L		92	80 - 120
Barium	100	94.4		ug/L		94	80 - 120
Beryllium	100	97.1		ug/L		97	80 - 120
Cadmium	100	93.8		ug/L		94	80 - 120
Calcium	2000	1890		ug/L		94	80 - 120
Chromium	100	98.2		ug/L		98	80 - 120
Cobalt	100	93.8		ug/L		94	80 - 120
Lead	200	189		ug/L		95	80 - 120
Lithium	200	197		ug/L		98	80 - 120
Molybdenum	200	191		ug/L		95	80 - 120
Selenium	400	381		ug/L		95	80 - 120
Thallium	100	93.9		ug/L		94	80 - 120

Lab Sample ID: LCS 310-473181/2-A
Matrix: Water
Analysis Batch: 474056

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	200	231		ug/L		116	80 - 120

Lab Sample ID: LCS 310-473181/2-A
Matrix: Water
Analysis Batch: 474530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	234		ug/L		117	80 - 120

Lab Sample ID: 310-320211-A-1-B MS
Matrix: Water
Analysis Batch: 473366

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0023		200	220		ug/L		110	75 - 125
Barium	0.41	F1	100	533	F1	ug/L		532	75 - 125
Beryllium	ND		100	103		ug/L		103	75 - 125
Boron	1700	B *+	200	2000	4	ug/L		136	75 - 125
Cadmium	ND		100	104		ug/L		104	75 - 125
Calcium	48000		2000	51500	4	ug/L		172	75 - 125
Chromium	ND		100	104		ug/L		104	75 - 125
Cobalt	0.00028	J	100	97.7		ug/L		98	75 - 125
Lead	ND		200	204		ug/L		102	75 - 125
Lithium	0.26	F1	200	459	F1	ug/L		230	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-320211-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473366 — **Prep Batch: 473181**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	0.0015	J	200	221		ug/L		111	75 - 125
Selenium	ND		400	432		ug/L		108	75 - 125
Thallium	ND		100	92.8		ug/L		93	75 - 125

Lab Sample ID: 310-320211-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473366 — **Prep Batch: 473181**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.0023		200	224		ug/L		112	75 - 125	2	20
Barium	0.41	F1	100	535	F1	ug/L		534	75 - 125	0	20
Beryllium	ND		100	103		ug/L		103	75 - 125	1	20
Boron	1700	B *+	200	2000	4	ug/L		136	75 - 125	0	20
Cadmium	ND		100	105		ug/L		105	75 - 125	1	20
Calcium	48000		2000	52600	4	ug/L		227	75 - 125	2	20
Chromium	ND		100	105		ug/L		105	75 - 125	1	20
Cobalt	0.00028	J	100	99.0		ug/L		99	75 - 125	1	20
Lead	ND		200	204		ug/L		102	75 - 125	0	20
Lithium	0.26	F1	200	457	F1	ug/L		228	75 - 125	1	20
Molybdenum	0.0015	J	200	226		ug/L		113	75 - 125	2	20
Selenium	ND		400	418		ug/L		104	75 - 125	3	20
Thallium	ND		100	91.3		ug/L		91	75 - 125	2	20

Lab Sample ID: 310-320211-A-2-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473366 — **Prep Batch: 473181**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0029		3.02	F3	ug/L		200	20
Barium	0.55		545	F3	ug/L		200	20
Beryllium	ND		ND		ug/L		NC	20
Cadmium	ND		ND		ug/L		NC	20
Calcium	56000		56800		ug/L		0.6	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	0.00027	J	0.254	J F3	ug/L		200	20
Lead	ND		ND		ug/L		NC	20
Lithium	0.22		220	F3	ug/L		200	20
Molybdenum	0.0024		1.95	J F3	ug/L		200	20
Selenium	ND		ND		ug/L		NC	20
Thallium	ND		ND		ug/L		NC	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-473581/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473705 — **Prep Batch: 473581**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00011	mg/L		11/14/25 13:00	11/15/25 12:48	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 310-473581/2-A
Matrix: Water
Analysis Batch: 473705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473581

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.00163		mg/L		98	80 - 120		

Lab Sample ID: 310-320278-A-2-C MS
Matrix: Water
Analysis Batch: 473705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00167	0.00168		mg/L		101	80 - 120		

Lab Sample ID: 310-320278-A-2-D MSD
Matrix: Water
Analysis Batch: 473705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00167	0.00169		mg/L		101	80 - 120	0	20

Lab Sample ID: MB 310-473655/1-A
Matrix: Water
Analysis Batch: 473813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00011	mg/L		11/15/25 12:00	11/17/25 09:04	1

Lab Sample ID: LCS 310-473655/2-A
Matrix: Water
Analysis Batch: 473813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473655

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.00168		mg/L		101	80 - 120		

Lab Sample ID: 310-320088-B-3-E MS
Matrix: Water
Analysis Batch: 473813

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND	F1	0.00167	0.00118	F1	mg/L		71	80 - 120		

Lab Sample ID: 310-320088-B-3-F MSD
Matrix: Water
Analysis Batch: 473813

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473655

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	0.00167	0.00117	F1	mg/L		70	80 - 120	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-506186/1
Matrix: Water
Analysis Batch: 506186

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			11/11/25 13:59	1

Lab Sample ID: LCS 180-506186/2
Matrix: Water
Analysis Batch: 506186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	285	252		mg/L		88	85 - 115

Lab Sample ID: 180-198179-G-1 DU
Matrix: Water
Analysis Batch: 506186

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2600		2590		mg/L		2	10

Lab Sample ID: 180-198209-2 DU
Matrix: Water
Analysis Batch: 506186

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	910		916		mg/L		1	10

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-744951/1-A
Matrix: Water
Analysis Batch: 748059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744951

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.06591	U	0.0801	0.0803	1.00	0.220	pCi/L	11/12/25 08:29	12/05/25 15:00	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*30 - 110*	*11/12/25 08:29*	*12/05/25 15:00*	*1*

Lab Sample ID: LCS 160-744951/2-A
Matrix: Water
Analysis Batch: 748059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744951

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	9.467		1.16	1.00	0.196	pCi/L	99	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.4*		*30 - 110*

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 280-216575-C-1-C MSD
Matrix: Water
Analysis Batch: 748061

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 744951

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	0.146	U	12.7	14.82		1.86	1.00	0.385	pCi/L	115	60 - 140	0.04	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*64.1*		*30 - 110*

Lab Sample ID: 280-216575-D-1-F MS
Matrix: Water
Analysis Batch: 748061

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 744951

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	0.146	U	12.6	14.67		1.86	1.00	0.474	pCi/L	115	60 - 140

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*61.6*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-744955/1-A
Matrix: Water
Analysis Batch: 747901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744955

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.04798	U	0.391	0.391	1.00	0.712	pCi/L	11/12/25 08:35	12/04/25 12:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*30 - 110*	*11/12/25 08:35*	*12/04/25 12:26*	*1*
Y Carrier	*80.7*		*30 - 110*	*11/12/25 08:35*	*12/04/25 12:26*	*1*

Lab Sample ID: LCS 160-744955/2-A
Matrix: Water
Analysis Batch: 747901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744955

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228			7.88	9.956		1.42	1.00	0.716	pCi/L	126	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.4*		*30 - 110*
Y Carrier	*83.0*		*30 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 280-216575-C-1-D MSD
Matrix: Water
Analysis Batch: 747873

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 744955

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	0.756	U G	10.5	16.00	F1	2.49	1.00	1.43	pCi/L	146	60 - 140	0.68	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*64.1*		*30 - 110*
Y Carrier	*74.0*		*30 - 110*

Lab Sample ID: 280-216575-D-1-H MS
Matrix: Water
Analysis Batch: 747873

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 744955

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	0.756	U G	10.4	12.79		2.22	1.00	1.59	pCi/L	116	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*61.6*		*30 - 110*
Y Carrier	*75.9*		*30 - 110*

HPLC/IC

Analysis Batch: 506165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	EPA 9056A	
180-198209-2	MW-3	Total/NA	Water	EPA 9056A	
180-198209-2	MW-3	Total/NA	Water	EPA 9056A	
180-198209-3	MW-4	Total/NA	Water	EPA 9056A	
180-198209-4	MW-5	Total/NA	Water	EPA 9056A	
180-198209-5	MW-5A	Total/NA	Water	EPA 9056A	
180-198209-5	MW-5A	Total/NA	Water	EPA 9056A	
180-198209-6	MW-5AR	Total/NA	Water	EPA 9056A	
180-198209-6	MW-5AR	Total/NA	Water	EPA 9056A	
180-198209-7	MW-6	Total/NA	Water	EPA 9056A	
180-198209-7	MW-6	Total/NA	Water	EPA 9056A	
180-198209-8	MW-6A	Total/NA	Water	EPA 9056A	
180-198209-8	MW-6A	Total/NA	Water	EPA 9056A	
180-198209-9	MW-7	Total/NA	Water	EPA 9056A	
180-198209-9	MW-7	Total/NA	Water	EPA 9056A	
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 9056A	
180-198209-11	FIELD BLANK	Total/NA	Water	EPA 9056A	
MB 180-506165/37	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-506165/38	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-198209-11 MS	FIELD BLANK	Total/NA	Water	EPA 9056A	
180-198209-11 MSD	FIELD BLANK	Total/NA	Water	EPA 9056A	

Analysis Batch: 506237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-3	MW-4	Total/NA	Water	EPA 9056A	
MB 180-506237/55	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-506237/56	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-198298-E-1 MS	Matrix Spike	Total/NA	Water	EPA 9056A	
180-198298-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 473181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	3005A	
180-198209-2	MW-3	Total/NA	Water	3005A	
180-198209-3	MW-4	Total/NA	Water	3005A	
180-198209-4	MW-5	Total/NA	Water	3005A	
180-198209-5	MW-5A	Total/NA	Water	3005A	
180-198209-6	MW-5AR	Total/NA	Water	3005A	
180-198209-7	MW-6	Total/NA	Water	3005A	
180-198209-8	MW-6A	Total/NA	Water	3005A	
180-198209-9	MW-7	Total/NA	Water	3005A	
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	3005A	
180-198209-11	FIELD BLANK	Total/NA	Water	3005A	
MB 310-473181/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-473181/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-320211-A-1-B MS	Matrix Spike	Total/NA	Water	3005A	
310-320211-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-320211-A-2-B DU	Duplicate	Total/NA	Water	3005A	

Metals

Analysis Batch: 473366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	EPA 6020B	473181
180-198209-2	MW-3	Total/NA	Water	EPA 6020B	473181
180-198209-3	MW-4	Total/NA	Water	EPA 6020B	473181
180-198209-4	MW-5	Total/NA	Water	EPA 6020B	473181
180-198209-6	MW-5AR	Total/NA	Water	EPA 6020B	473181
180-198209-7	MW-6	Total/NA	Water	EPA 6020B	473181
180-198209-8	MW-6A	Total/NA	Water	EPA 6020B	473181
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 6020B	473181
180-198209-11	FIELD BLANK	Total/NA	Water	EPA 6020B	473181
MB 310-473181/1-A	Method Blank	Total/NA	Water	EPA 6020B	473181
LCS 310-473181/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	473181
310-320211-A-1-B MS	Matrix Spike	Total/NA	Water	EPA 6020B	473181
310-320211-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 6020B	473181
310-320211-A-2-B DU	Duplicate	Total/NA	Water	EPA 6020B	473181

Analysis Batch: 473514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-5	MW-5A	Total/NA	Water	EPA 6020B	473181
180-198209-9	MW-7	Total/NA	Water	EPA 6020B	473181
MB 310-473181/1-A	Method Blank	Total/NA	Water	EPA 6020B	473181

Prep Batch: 473581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-6	MW-5AR	Total/NA	Water	7470A	
MB 310-473581/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-473581/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-320278-A-2-C MS	Matrix Spike	Total/NA	Water	7470A	
310-320278-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 473655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-473655/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-473655/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-320088-B-3-E MS	Matrix Spike	Total/NA	Water	7470A	
310-320088-B-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 473705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-6	MW-5AR	Total/NA	Water	EPA 7470A	473581
MB 310-473581/1-A	Method Blank	Total/NA	Water	EPA 7470A	473581
LCS 310-473581/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	473581
310-320278-A-2-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	473581
310-320278-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	473581

Analysis Batch: 473813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-473655/1-A	Method Blank	Total/NA	Water	EPA 7470A	473655
LCS 310-473655/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	473655
310-320088-B-3-E MS	Matrix Spike	Total/NA	Water	EPA 7470A	473655
310-320088-B-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	473655

Metals

Analysis Batch: 474056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	EPA 6020B	473181
180-198209-2	MW-3	Total/NA	Water	EPA 6020B	473181
180-198209-3	MW-4	Total/NA	Water	EPA 6020B	473181
180-198209-4	MW-5	Total/NA	Water	EPA 6020B	473181
180-198209-5	MW-5A	Total/NA	Water	EPA 6020B	473181
180-198209-6	MW-5AR	Total/NA	Water	EPA 6020B	473181
180-198209-7	MW-6	Total/NA	Water	EPA 6020B	473181
180-198209-8	MW-6A	Total/NA	Water	EPA 6020B	473181
180-198209-9	MW-7	Total/NA	Water	EPA 6020B	473181
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	EPA 6020B	473181
180-198209-11	FIELD BLANK	Total/NA	Water	EPA 6020B	473181
MB 310-473181/1-A	Method Blank	Total/NA	Water	EPA 6020B	473181
LCS 310-473181/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	473181

Analysis Batch: 474530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-6	MW-5AR	Total/NA	Water	EPA 6020B	473181
MB 310-473181/1-A	Method Blank	Total/NA	Water	EPA 6020B	473181
LCS 310-473181/2-A	Lab Control Sample	Total/NA	Water	EPA 6020B	473181

General Chemistry

Analysis Batch: 506186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	SM 2540C	
180-198209-2	MW-3	Total/NA	Water	SM 2540C	
180-198209-3	MW-4	Total/NA	Water	SM 2540C	
180-198209-4	MW-5	Total/NA	Water	SM 2540C	
180-198209-5	MW-5A	Total/NA	Water	SM 2540C	
180-198209-6	MW-5AR	Total/NA	Water	SM 2540C	
180-198209-7	MW-6	Total/NA	Water	SM 2540C	
180-198209-8	MW-6A	Total/NA	Water	SM 2540C	
180-198209-9	MW-7	Total/NA	Water	SM 2540C	
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	SM 2540C	
180-198209-11	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 180-506186/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-506186/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-198179-G-1 DU	Duplicate	Total/NA	Water	SM 2540C	
180-198209-2 DU	MW-3	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 744951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-6	MW-5AR	Total/NA	Water	PrecSep-21	
MB 160-744951/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-744951/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
280-216575-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
280-216575-D-1-F MS	Matrix Spike	Total/NA	Water	PrecSep-21	

QC Association Summary

Client: Midwest Environmental Consultants
Job ID: 180-198209-2
Project/Site: Asbury Pond CCR

Rad

Prep Batch: 744955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-6	MW-5AR	Total/NA	Water	PrecSep_0	
MB 160-744955/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-744955/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
280-216575-C-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
280-216575-D-1-H MS	Matrix Spike	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 506493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198209-1	MW-2	Total/NA	Water	Field Sampling	
180-198209-2	MW-3	Total/NA	Water	Field Sampling	
180-198209-3	MW-4	Total/NA	Water	Field Sampling	
180-198209-4	MW-5	Total/NA	Water	Field Sampling	
180-198209-5	MW-5A	Total/NA	Water	Field Sampling	
180-198209-6	MW-5AR	Total/NA	Water	Field Sampling	
180-198209-7	MW-6	Total/NA	Water	Field Sampling	
180-198209-8	MW-6A	Total/NA	Water	Field Sampling	
180-198209-9	MW-7	Total/NA	Water	Field Sampling	
180-198209-10	DUPLICATE (AT MW-5)	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Phone (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Ryan Ostbals	Lab PM: Johnson, Andy	Carrier Tracking No(s):	COC No: 180-91658-16873.1
Client Contact: ~~Anita Careaga~~ Lindsey Henry	Phone: 573-636-9454	E-Mail: Andy.Johnson@et.eurofinsus.com	State of Origin: MO	Page: Page 1 of 1
Company: Midwest Environmental Consultants	PWSID:			Job #:

Address	Due Date Requested:
2009 East McCarty Street Suite 2	
City: Jefferson City	TAT Requested (days):
State, Zip: MO, 65101	Compliance Project: Δ Yes Δ No
Phone: 573-636-9454(Tel)	PO #: Purchase Order not required
Email: ~~acareaga@mecpc.com~~ lhenry@mecpc.com	WO #:
Project Name: Asbury Pond - CCR	Project #: 18023389
Site:	SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056A_ORGFM_28D - (MOD)Chloride, Fluoride & Sulfate	6020 - Boron/Calcium	2540C_Calcd - (MOD) TDS		6020/7470 - CCR Appiii/iv metals (sample MW-5AR)	9315_Ra226 - Standard Target List (sample MW-5AR)	9320_Ra228 - Standard Target List (sample MW-5AR)		6020_CCR Apeendex IV metals - sample MW5AR only)					Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N		D	D	D		D						
MW-2	11-6-25	8:30	G	W			X	X	X												pH = 6.15 Spec Cond = 0.964
MW-3	11-5-25	10:55	G	W			X	X	X												pH = 5.78 Spec Cond = 1.115
MW-4	11-6-25	9:15	G	W			X	X	X												pH = 6.61 Spec Cond = 0.784
MW-5	11-6-25	10:00	G	W			X	X	X												pH = 7.23 Spec Cond = 0.824
MW-5A	11-5-25	12:10	G	W			X	X	X												pH = 6.61 Spec Cond = 3.507
MW-5AR	11-5-25	11:40	G	W			X		X		X	X	X		x						pH = 7.46 Spec Cond = 1.124
MW-6	11-5-25	12:55	G	W			X	X	X												pH = 6.92 Spec Cond = 2.120
MW-6A	11-5-25	1:30	G	W			X	X	X												pH = 6.38 Spec Cond = 2.150
MW-7	11-5-25	2:15	G	W			X	X	X												pH = 6.28 Spec Cond = 2.638
Duplicate (at MW-)	11-6-25	10:15	G	W			X	X	X												pH = 7.23 Spec Cond = 0.824
Field Blank	11-6-25	9:20	G	W			X	X	X												pH = X Spec Cond = X

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Ryan Ostbals	11-6-25 / 11:45	MEC	FedEX	11-6-25 / 11:45	FedEX
				11/7/25 0830	ESSMS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks.

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

SHIP DATE: 15OCT
ACTWGT: 30.00 LB
CAD: 0522321/CAF

TO SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO. TESTING PITT N.E.
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN
RMA:

FedEx
TRK# 0221 4642 5783 1887

FRI - 07
PRIORITY OV

XG AGCA

Uncorrected temp 2.5 °C
Thermometer ID 25
CF +0.1 Initials [handwritten initials]
PT-WI-SR-001 effective 11/8/18

2496836 06Nov2025 JLNA 58HG2/501C/484B

SHIP DATE: 15OCT
ACTWGT: 30.00 LB
JEFFERSON CITY, MO 65101
UNITED STATES US

TO SAMPLE RECEIVING DEPART
EUROFINS ENVIRO. TESTING
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN
RMA:

FedEx
TRK# 0221 4642 5783 1876
PRIO

XG AGCA

Uncorrected temp 3.8 °C
Thermometer ID 25
CF +0.1 Initials [handwritten initials]
PT-WI-SR-001 effective 11/8/18
2496836 06Nov2025 JLNA 58HG2/501C/484B

4150 FRI 11/07
301 ALPHA DR
PRIORI
198
ETP 43

180-198209 Waybill

ORIGIN ID:AGCA (602) 659-7669
RICK ELGIN (ASBURY POND)
MIDWEST ENVIRONMENTAL CONSULTANTS
2009 EAST MCCARTY STREET
SUITE 2
JEFFERSON CITY, MO 65101
UNITED STATES US

TO SAMPLE RECEIVING DEPAR
EUROFINS ENVIRO. TESTING
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN
RMA:

Uncorrected temp 4.4
Thermometer ID 25
CF +0.1 Initials [handwritten initials]
PT-WI-SR-001 effective 11/8/18

FedEx
TRK# 0221 4642 5783 1902
PR

XG AGCA

2496836 06Nov2025 JLNA 58HG2/501C/484B

4150 FRI 11/07 07 03
301 ALPHA DR
PRIORITY OVERNIGHT
198-1094FL
ETP 43
SP PD 100 Y
15238-2907-01
PITTSBURGH,PA

D:AGCA (602) 659-7669
GIN (ASBURY POND)
ENVIRONMENTAL CONSULTANTS
AST MCCARTY STREET
2
SON CITY, MO 65101
D STATES US

SAMPLE RECEIVING DEP
EUROFINS ENVIRO. TEST
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-7530
REF: RETURN
RMA:

FedEx
TRK# 0221 4642 5783 1898
PI

XG AGCA

Uncorrected temp 3.0 °C
Thermometer ID 25
CF +0.1 Initials [handwritten initials]
PT-WI-SR-001 effective 11/8/18
2496836 06Nov2025 JLNA 58HG2/501C/484B

/07 07 07
Y OVERNIGHT
094FL
100 Y
15238 2907 01
PITTSBURGH,PA

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548518.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-198209-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/20/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21Standard Target List	9320_Ra228/PrecSep_0Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-2 (180-198209-1)	11/6/25	08:30 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-3 (180-198209-2)	11/5/25	10:55 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-4 (180-198209-3)	11/6/25	09:15 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5 (180-198209-4)	11/6/25	10:00 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5A (180-198209-5)	11/5/25	12:10 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-5AR (180-198209-6)	11/5/25	11:40 Central	G	Water			X	X	X	2	Historical Review required; Run once, upload twice
MW-6 (180-198209-7)	11/5/25	12:55 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-6A (180-198209-8)	11/5/25	01:30 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
MW-7 (180-198209-9)	11/5/25	02:15 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 11/10/25 1700	Company	Received by:	Date/Time: 0935 NOV 11 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548518.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-198209-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/20/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21Standard Target List	9320_Ra228/PrecSep_0Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-198209-10)	11/6/25	10:15 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;
FIELD BLANK (180-198209-11)	11/6/25	09:20 Central	G	Water			X	X	X	2	Historical Review required, Historical Review required;

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/10/25 1700	Company	Received by:	Date/Time: 0935 NOV 11 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548518.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail.Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 180-198209-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/17/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond CCR	Project #: 18023389			Other: N/A
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0Radium-228 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228 (calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-5AR (180-198209-6)	11/5/25	11:40 Central	G	Water			X	X	X	2	Historical Review required; Run once, upload twice

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11/10/25 1700	Company	Received by:	Date/Time: 0935 11/11/25	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

eurofins | Environment Testing America

180-198209 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: TA Pittsburgh

City/State. CITY: | STATE: | Project:

Receipt Information

Date/Time Received: DATE 11/11/25 | TIME 1015 | Received By: JJ

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☐ Yes	☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE

Thermometer ID: 2 | Correction Factor (°C): +0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): | Corrected Temp (°C):

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:	PL250 nitric	
Uncorrected Temp (°C):	6.0	
Corrected Temp (°C).	6.0	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548514 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus com	State of Origin: Missouri	Page: Page 1 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-198209-1
Address: 3019 Venture Way ,	Due Date Requested: 11/20/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT(MOD) Metals by 6020B	7470A/7470A_PrepMercury	6020B/3005A_TOT(MOD) *Custom Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-2 (180-198209-1)	11/6/25	08 30 Central	G	Water			X	X		2	run once - report twice
MW-3 (180-198209-2)	11/5/25	10.55 Central	G	Water			X	X		2	run once - report twice
MW-4 (180-198209-3)	11/6/25	09:15 Central	G	Water			X	X		2	run once - report twice
MW-5 (180-198209-4)	11/6/25	10:00 Central	G	Water			X	X		2	run once - report twice
MW-5A (180-198209-5)	11/5/25	12.10 Central	G	Water			X	X		2	run once - report twice
MW-5AR (180-198209-6)	11/5/25	11 40 Central	G	Water				X	X	2	run once - report twice
MW-6 (180-198209-7)	11/5/25	12.55 Central	G	Water			X	X		2	run once - report twice
MW-6A (180-198209-8)	11/5/25	01 30 Central	G	Water			X	X		2	run once - report twice
MW-7 (180-198209-9)	11/5/25	02.15 Central	G	Water			X	X		2	run once - report twice

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:
Relinquished by:	Date/Time: 11/10/25 1700	Company	Received by: / Date/Time: / Company
Relinquished by:	Date/Time:	Company	Received by: / Date/Time: / Company
Relinquished by:	Date/Time:	Company	Received by: / Date/Time: 11/11/25 1015 / Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

12/9/2025

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone. 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548514 2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus com	State of Origin: Missouri	Page: Page 2 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-198209-1
Address: 3019 Venture Way ,	Due Date Requested: 11/20/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond NPDES	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT(MOD) Metals by 6020B	7470A/7470A_PrepMercury	6020B/3005A_TOT(MOD) *Custom Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-198209-10)	11/6/25	10 15 Central	G	Water			X	X		2	run once - report twice
FIELD BLANK (180-198209-11)	11/6/25	09:20 Central	G	Water			X	X		2	run once - report twice

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date.	Time.	Method of Shipment:

Relinquished by:	Date/Time: 11/10/25 1700	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/11/25 1015	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548514.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus.com	State of Origin: Missouri	Page: Page 1 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-198209-2
Address: 3019 Venture Way, ,	Due Date Requested: 11/20/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond CCR	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT(MOD) B/Ca by 6020B	6020B/3005A_TOT(MOD) Custom Metals List	7470A/7470A_PrepMercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-2 (180-198209-1)	11/6/25	08 30 Central	G	Water			X			2	
MW-3 (180-198209-2)	11/5/25	10:55 Central	G	Water			X			2	
MW-4 (180-198209-3)	11/6/25	09 15 Central	G	Water			X			2	
MW-5 (180-198209-4)	11/6/25	10 00 Central	G	Water			X			2	
MW-5A (180-198209-5)	11/5/25	12 10 Central	G	Water			X			2	
MW-5AR (180-198209-6)	11/5/25	11.40 Central	G	Water				X	X	2	run once - report twice
MW-6 (180-198209-7)	11/5/25	12.55 Central	G	Water			X			2	
MW-6A (180-198209-8)	11/5/25	01 30 Central	G	Water			X			2	
MW-7 (180-198209-9)	11/5/25	02.15 Central	G	Water			X			2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date.	Time.	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	11/10/25 1700				
Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time: 11/11/25 1015	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 10/10/2024

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Lage, Gail	Carrier Tracking No(s): N/A	COC No: 180-548514.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Gail Lage@et.eurofinsus com	State of Origin: Missouri	Page: Page 2 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): N/A		Job #: 180-198209-2
Address: 3019 Venture Way, ,	Due Date Requested: 11/20/2025			Preservation Codes: -
City: Cedar Falls	TAT Requested (days): N/A			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Asbury Pond CCR	Project #: 18023389			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A_TOT(MOD) B/Ca by 6020B	6020B/3005A_TOT(MOD) Custom Metals List	7470A/7470A_PrepMercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DUPLICATE (AT MW-5) (180-198209-10)	11/6/25	10:15 Central	G	Water			X			2	
FIELD BLANK (180-198209-11)	11/6/25	09:20 Central	G	Water			X			2	

Analysis Requested

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		11/10/25 1700				
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/11/25 1015	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks.

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-198209-2

Login Number: 198209

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-198209-2

Login Number: 198209
List Number: 2
Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls
List Creation: 11/11/25 11:09 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Midwest Environmental Consultants

Job Number: 180-198209-2

Login Number: 198209
List Number: 3
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 11/11/25 01:30 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

APPENDIX 4

Statistical Analysis

JETT ENVIRONMENTAL CONSULTING

January 8, 2026 ***Submitted via Email***

Mr. Lindsey R. Henry, PE
Midwest Environmental Consultants
2009 E. McCarty St., Suite 2
Jefferson City, MO 65101

Re: Groundwater Statistical Analysis Results
Asbury Power Plant – Coal Combustion Residuals (CCR) Impoundment
United States Environmental Protection Agency Program

Dear Mr. Henry:

Jett Environmental Consulting is providing the results of the groundwater statistical analysis for the November 2025 event at the Asbury Power Plant – CCR Impoundment.

If you have any questions or comments, please contact me at steve.jett@jettenviro.com or 314-496-4654.

Sincerely,

Steve Jett, P.G.
Owner

Travis Doll
Senior Geologist

Attachments:
Table 1 – SSIs Observed During November 2025 Sampling Event
1 - Time Series Graphs – Inorganics
2 - Trend Testing – Inorganics
3 - Inter-Well Prediction Limits
4 - Statistical Power Curves

Inorganics – Times Series & Trend Testing

Time Series graphs were generated for each of the inorganic constituents. The time series graphs are included in **Attachment 1**.

The inorganic constituents with results above the laboratory reporting limits were analyzed with Sanitas™ to determine if statistically significant increasing or decreasing trends exist within the background data range (January 2016 through May 2023) utilizing the Sen's Slope / Mann-Kendall trend test. Trends were based on a 98% confidence level (two tailed). The following constituents exhibited statistically significant increasing trends: boron (MW-5A), calcium (MW-5A, MW-6A), chloride (MW-5, MW-5A, MW-6), sulfate (MW-5A, MW-6A), and total dissolved solids (MW-5A, MW-6A). Of the increasing trends, no instances were for an upgradient well. All other constituents were either not trending or had a statistically significant decreasing trend. The trending data have only been reviewed at this time. No trending data was removed before performing the inter-well prediction interval analysis. The trend testing results are included in **Attachment 2**.

Inorganics – Inter-Well Prediction Limits

Statistical Analysis was performed on the inorganic constituents and metals. Prediction interval analyses compare one or more observations to a limit set by background data. Background data consists of semi-annual groundwater tests from the upgradient wells (MW-2, MW-3, and MW-7) between January 2016 and May 2023 (20 events). Inter-well analyses compare observations from upgradient background wells and their relation to the observations for the downgradient wells. Intra-well analyses compare background observations to current observations of the same well.

Sanitas™ was used to perform the statistical analyses. For most constituents, non-parametric inter-well prediction intervals were performed due to non-detectable levels in more than 50 percent of the background samples or if data were not normally distributed. The Sanitas™ inter-well prediction limit outputs are included in **Attachment 3**.

Table 1 lists the parameters that exhibited a statistically significant increase (SSI) during the November 2025 sampling event, the associated monitoring wells, inter-well prediction limit, and the measured concentration. Also included on the table is a comparison to any established USEPA National Primary Drinking Water Standard - Maximum Contaminant Level (MCL).

Statistical Power Curves

A statistical power curve graph has been prepared to allow comparisons between the current monitoring program and USEPA-recommended standards. Under the USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (March 2009), inter-well prediction limits are constructed to have a site-wide false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. **Attachment 4** presents the power curves for the facility's monitoring program.

Results Summary

Boron (MW-5A), pH (MW-5), and total dissolved solids (MW-5A) exhibited confirmed SSIs during the November 2025 event.

No initial SSIs were exhibited during the November 2025 event.

Of the SSIs, none have an established MCL.

Table 1 SSIs Observed During November 2025 Sampling Event					
Constituent (units)	**Well**	**Initial vs. Confirmed**	**Statistical Limit**	**Result**	**MCL**
Boron (mg/L)	MW-5A	Confirmed	0.9	2.5	NE
pH (SU)	MW-5	Confirmed	5.22 - 6.98	7.23	NE
Total Dissolved Solids (mg/L)	MW-5A	Confirmed	3100	3300	NE

NE = Not Established.

MCL = USEPA National Primary Drinking Water Standard - Maximum Contaminant Level

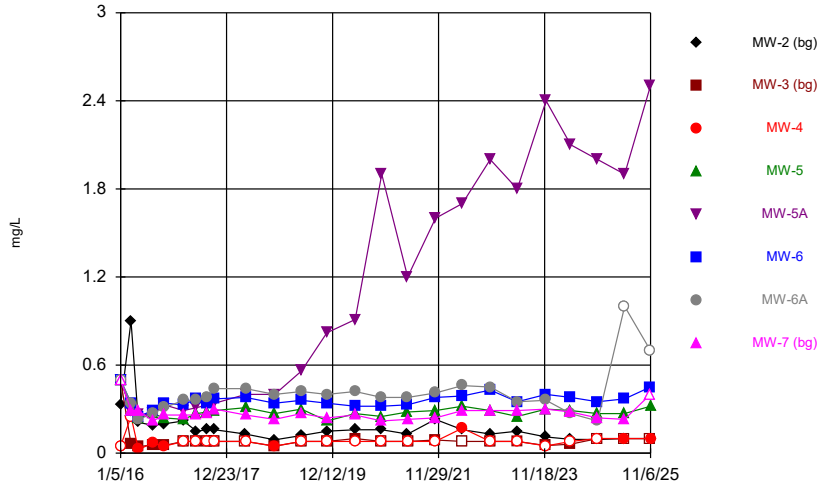
ATTACHMENTS

ATTACHMENT 1

TIME SERIES GRAPHS
INORGANICS

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

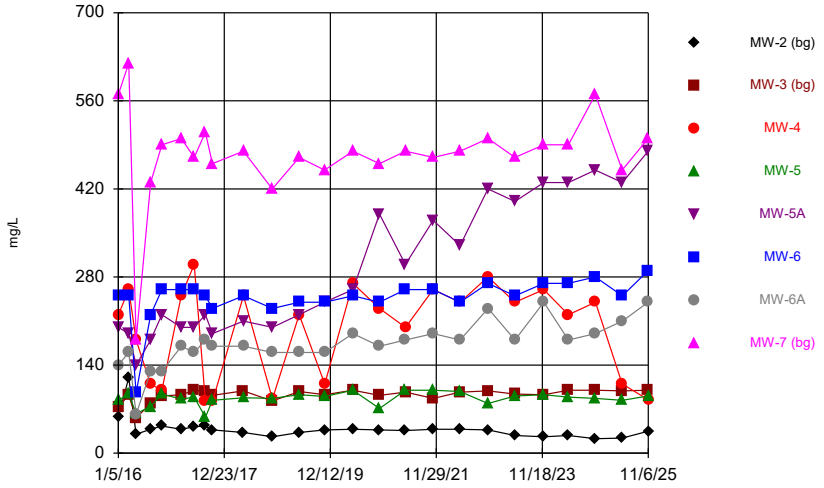
Boron



Time Series Analysis Run 1/7/2026 4:12 PM View: TS
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Calcium



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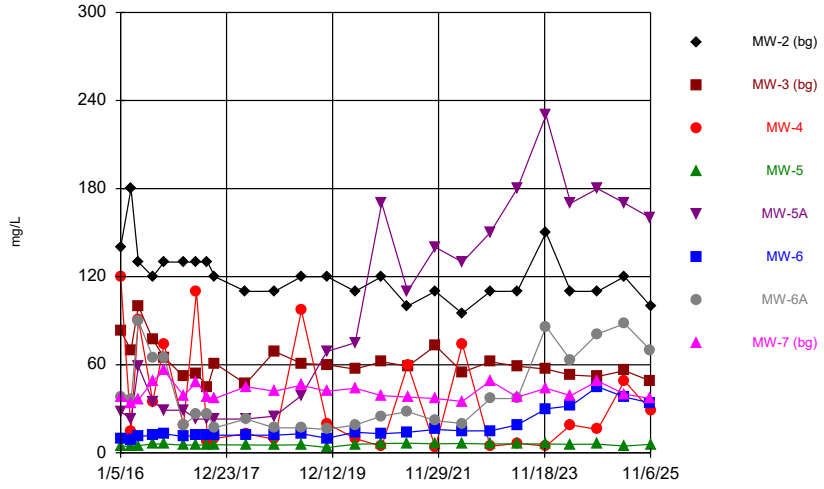
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

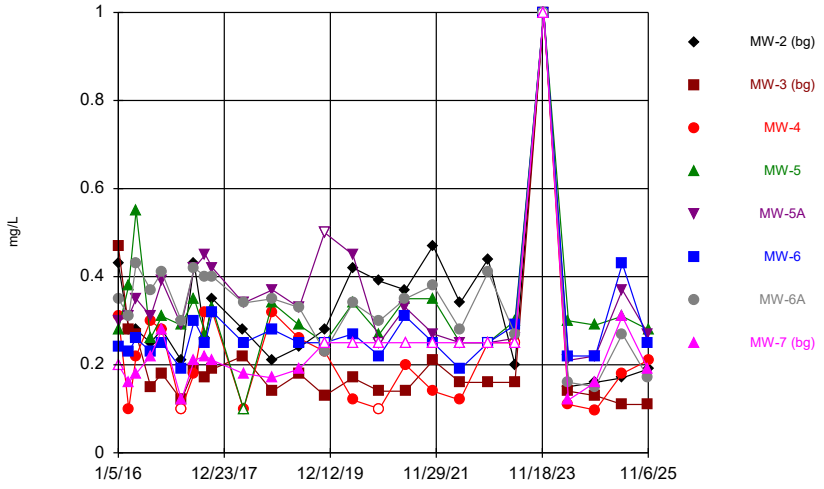
Chloride



Time Series Analysis Run 1/7/2026 4:12 PM View: TS
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

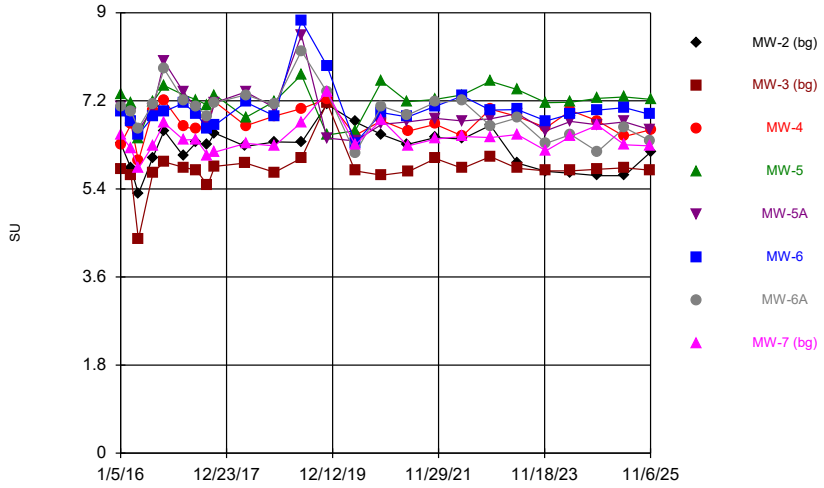
Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Fluoride



Time Series Analysis Run 1/7/2026 4:12 PM View: TS
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH



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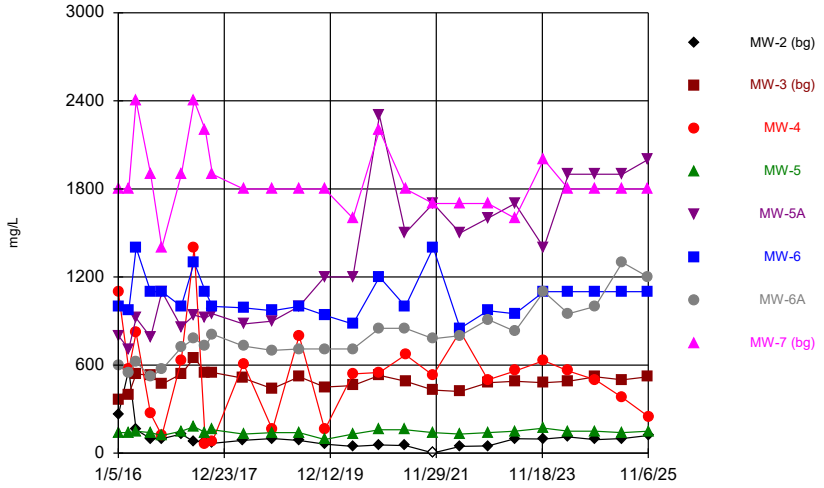
Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

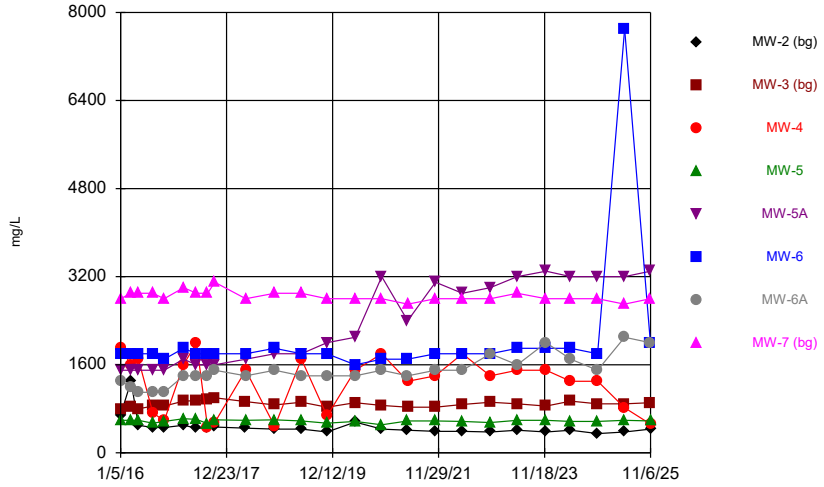
Sulfate



Time Series Analysis Run 1/7/2026 4:12 PM View: TS

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids



Time Series Analysis Run 1/7/2026 4:12 PM View: TS

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

ATTACHMENT 2

TREND TESTING
INORGANICS

Trend Test

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 1/7/2026, 4:17 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-2 (bg)**	**-0.01157**	**-74**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Boron (mg/L)	MW-3 (bg)	1.4e-10	44	73	No	20	60	n/a	n/a	0.02	NP
Boron (mg/L)	MW-4	0	52	73	No	20	75	n/a	n/a	0.02	NP
Boron (mg/L)	MW-5	0	13	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	**MW-5A**	**0.2069**	**149**	**73**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.02**	**NP**
Boron (mg/L)	MW-6	0.004198	36	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	MW-6A	0.014	59	73	No	20	5	n/a	n/a	0.02	NP
Boron (mg/L)	MW-7 (bg)	0	-22	-73	No	20	5	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-2 (bg)	-1.025	-60	-73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-3 (bg)	1.323	60	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-4	5.128	33	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	MW-5	1.7	51	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	**MW-5A**	**29.17**	**136**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	MW-6	0	30	73	No	20	0	n/a	n/a	0.02	NP
Calcium (mg/L)	**MW-6A**	**7.097**	**108**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	MW-7 (bg)	0	-12	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**MW-2 (bg)**	**-4.251**	**-121**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	MW-3 (bg)	-1.609	-43	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**MW-4**	**-3.614**	**-74**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-5**	**0.1787**	**93**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-5A**	**17.84**	**105**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-6**	**0.7246**	**126**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	MW-6A	-1.923	-41	-73	No	20	0	n/a	n/a	0.02	NP
Chloride (mg/L)	MW-7 (bg)	-0.08072	-10	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-2 (bg)	0.008487	22	73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-3 (bg)	-0.006744	-61	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-4	-0.006169	-21	-73	No	20	20	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-5	-0.004548	-27	-73	No	20	5	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-5A	-0.007672	-37	-73	No	20	15	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-6	0.0007283	23	73	No	20	10	n/a	n/a	0.02	NP
Fluoride (mg/L)	MW-6A	-0.009747	-49	-73	No	20	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	**MW-7 (bg)**	**0.008083**	**77**	**73**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.02**	**NP**
pH (SU)	MW-2 (bg)	0.05735	59	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-3 (bg)	0.02709	52	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-4	0.0217	19	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-5	0.02125	34	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-5A	-0.03798	-29	-73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-6	0.03219	46	73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-6A	-0.008695	-9	-73	No	20	0	n/a	n/a	0.02	NP
pH (SU)	MW-7 (bg)	0.03464	52	73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-2 (bg)**	**-16.16**	**-122**	**-73**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-3 (bg)	-6.48	-24	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	MW-4	-6.658	-7	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	MW-5	0	-3	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-5A**	**127.3**	**132**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-6	-18.61	-57	-73	No	20	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	**MW-6A**	**34.49**	**108**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	MW-7 (bg)	-33.2	-70	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-2 (bg)**	**-16.07**	**-127**	**-73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-3 (bg)	5.317	19	73	No	20	0	n/a	n/a	0.02	NP

Trend Test

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 1/7/2026, 4:17 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	MW-4	-6.971	-7	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	MW-5	-3.205	-42	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-5A**	**195.1**	**156**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-6	0	-4	-73	No	20	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	**MW-6A**	**50.05**	**113**	**73**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	MW-7 (bg)	0	-48	-73	No	20	0	n/a	n/a	0.02	NP

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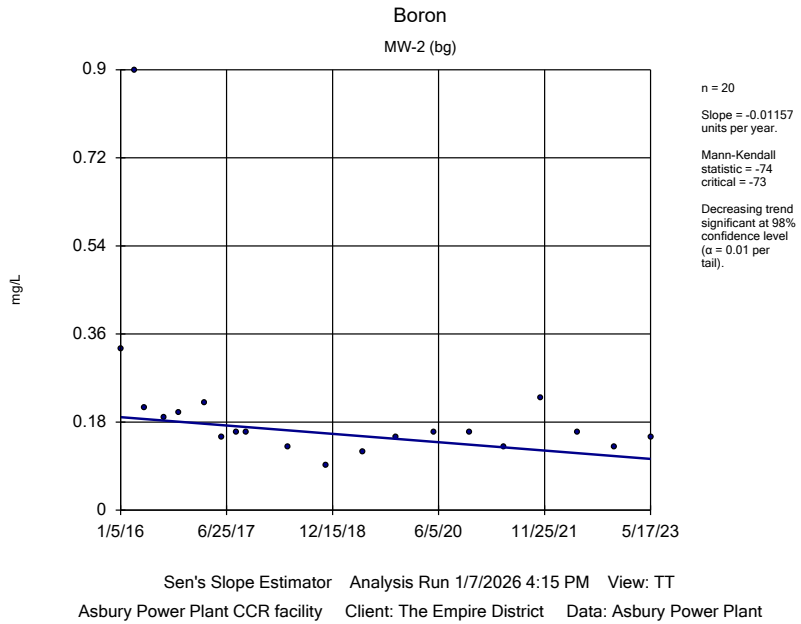

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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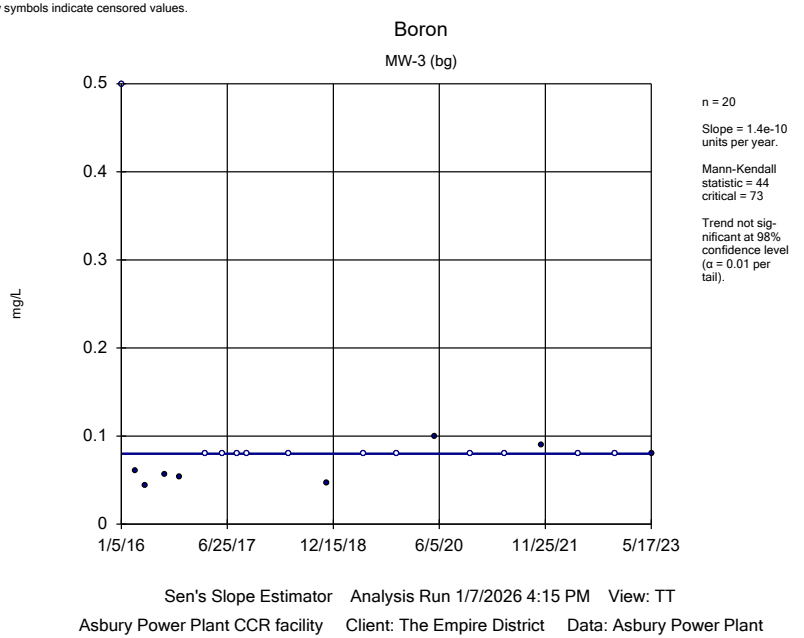

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Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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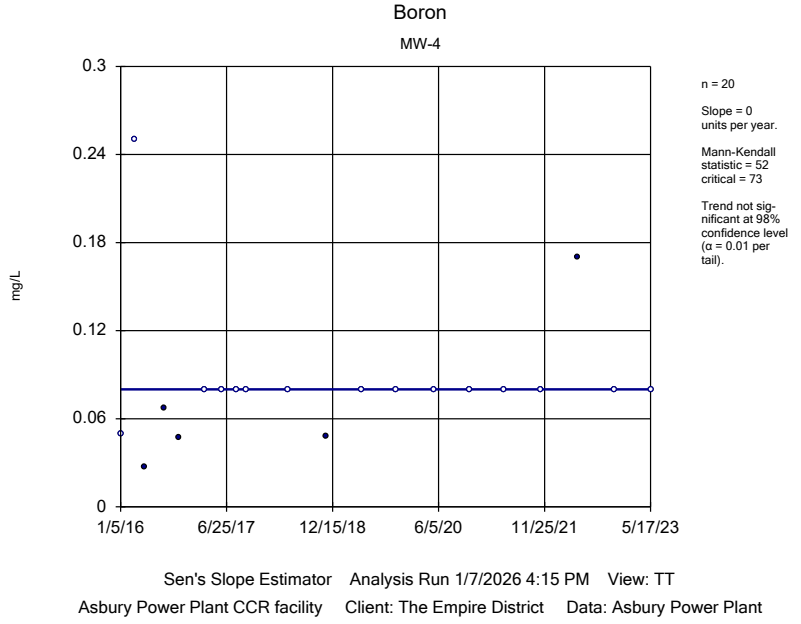

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Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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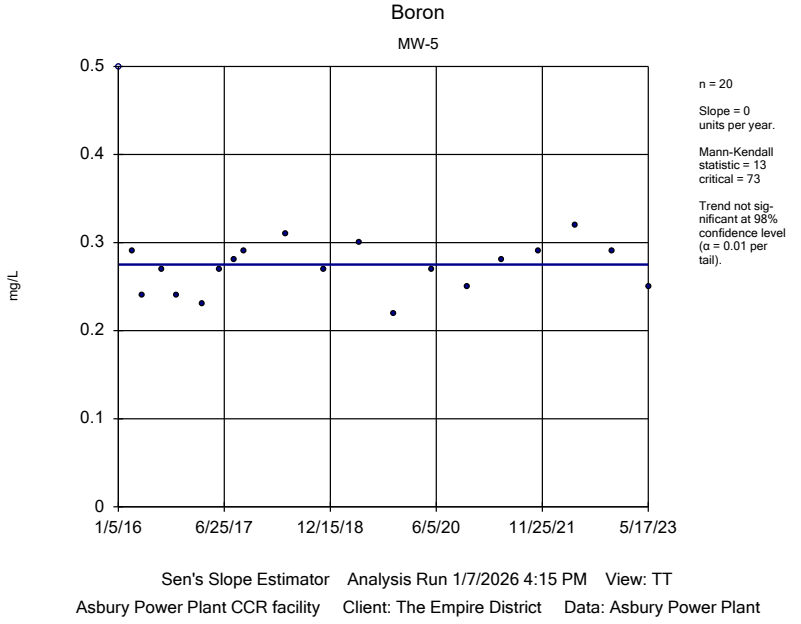

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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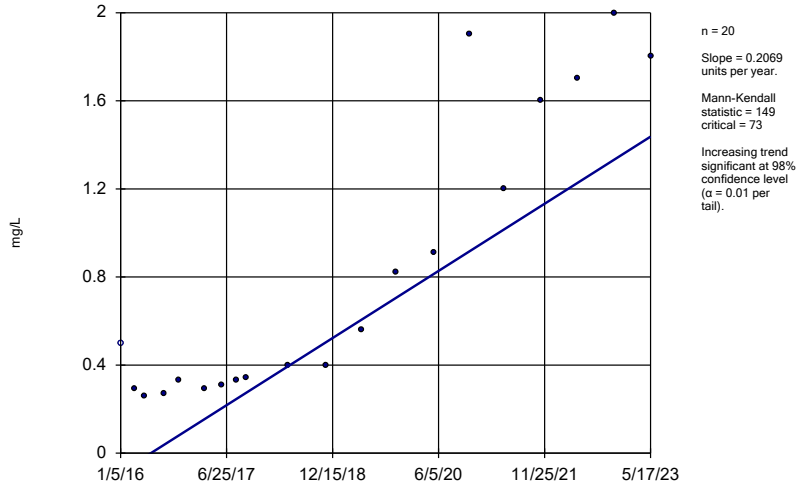
Hollow symbols indicate censored values.

Boron

MW-5A



n = 20

Slope = 0.2069 units per year.

Mann-Kendall statistic = 149
critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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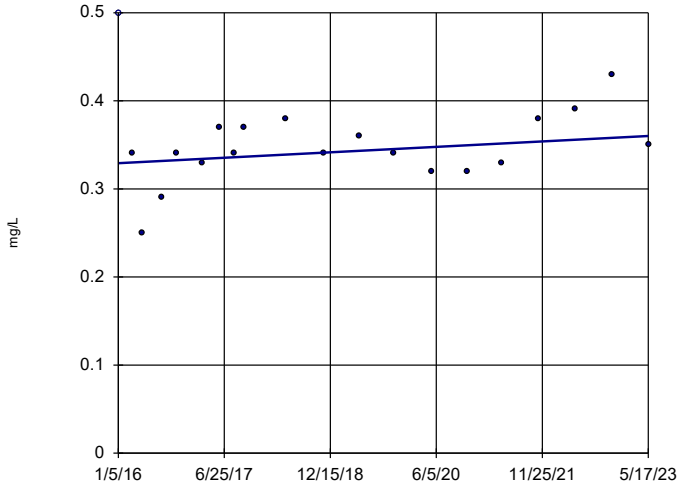
Hollow symbols indicate censored values.

Boron

MW-6



n = 20

Slope = 0.004198 units per year.

Mann-Kendall statistic = 36
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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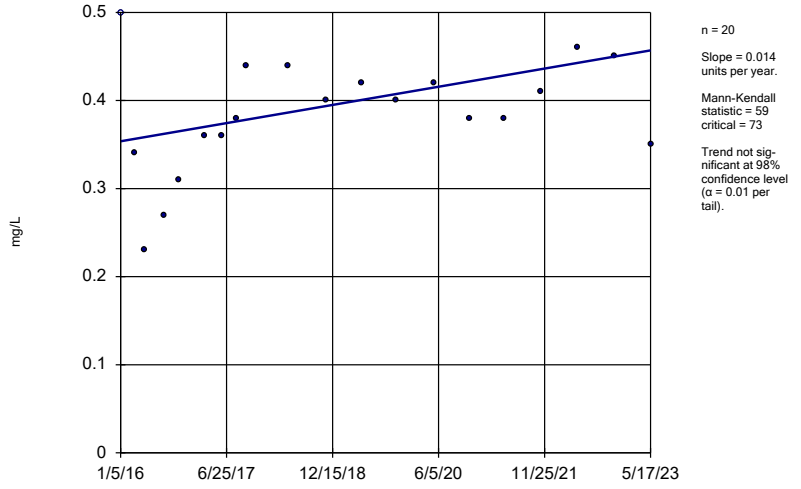
Hollow symbols indicate censored values.

Boron

MW-6A



n = 20

Slope = 0.014 units per year.

Mann-Kendall statistic = 59
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

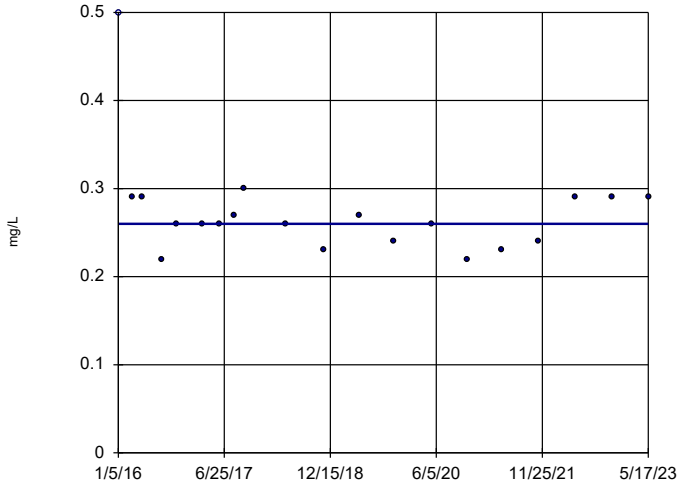
Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Boron

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -22
critical = -73

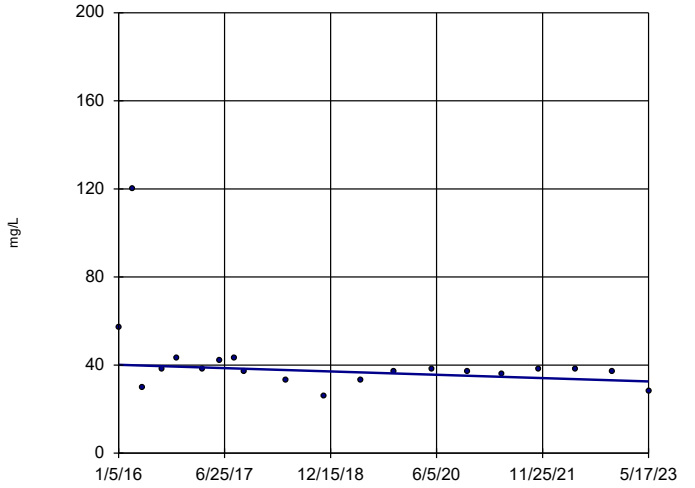
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Calcium

MW-2 (bg)



n = 20

Slope = -1.025 units per year.

Mann-Kendall statistic = -60 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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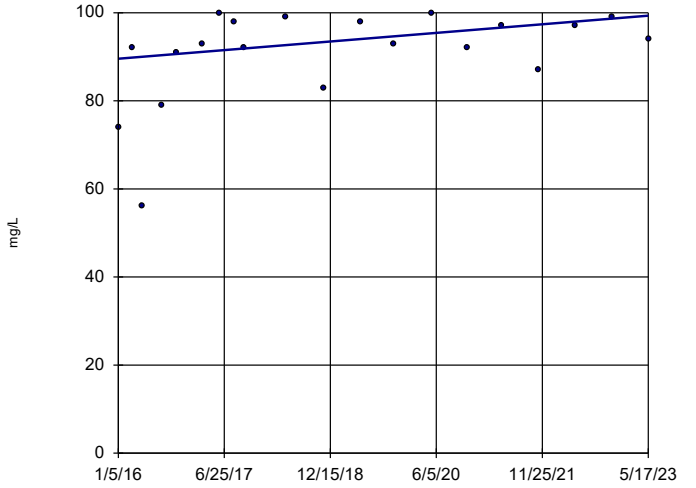
Calcium

MW-3 (bg)



n = 20

Slope = 1.323 units per year.

Mann-Kendall statistic = 60 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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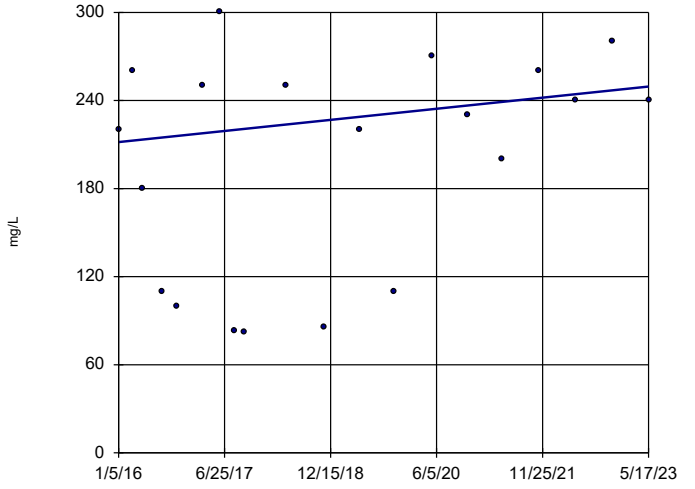
Calcium

MW-4



n = 20

Slope = 5.128 units per year.

Mann-Kendall statistic = 33 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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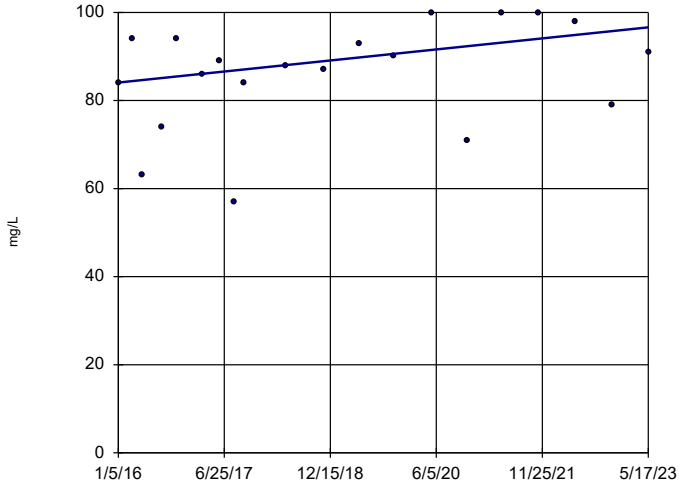
Calcium

MW-5



n = 20

Slope = 1.7 units per year.

Mann-Kendall statistic = 51 critical = 73

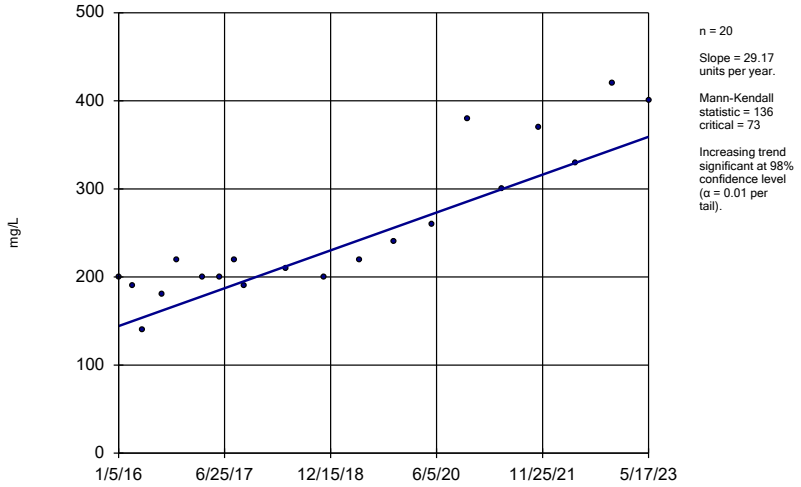
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Calcium

MW-5A



n = 20

Slope = 29.17 units per year.

Mann-Kendall statistic = 136 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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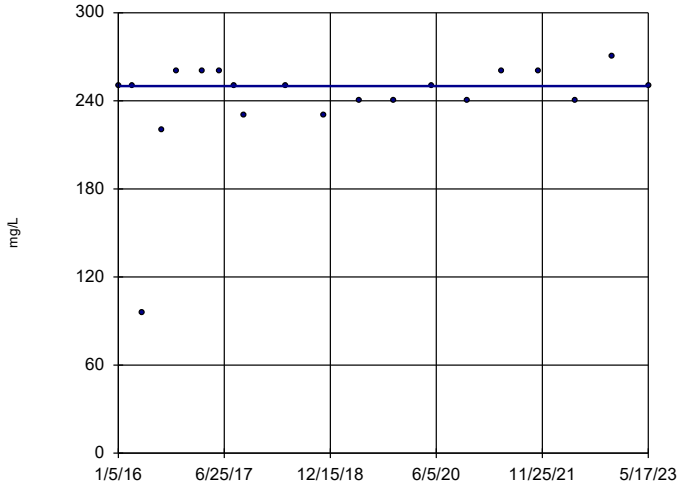
Calcium

MW-6



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 30 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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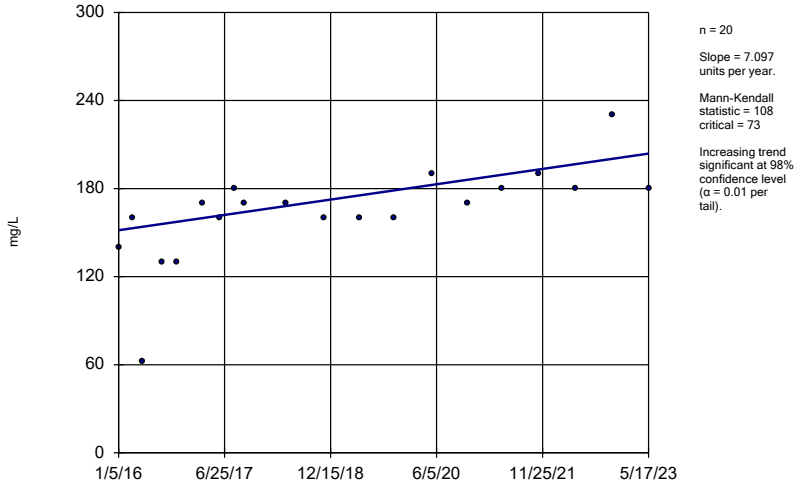
Calcium

MW-6A



n = 20

Slope = 7.097 units per year.

Mann-Kendall statistic = 108 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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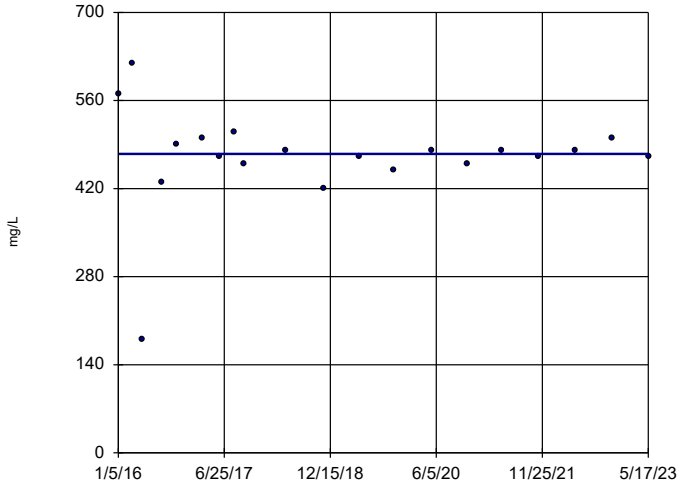
Calcium

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -12 critical = -73

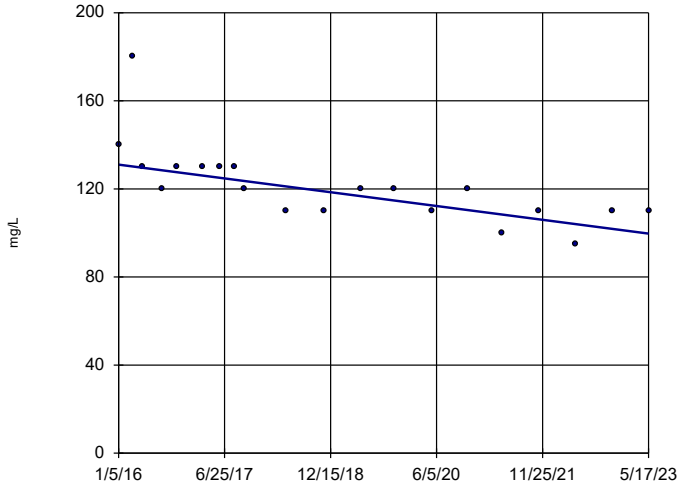
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Chloride

MW-2 (bg)



n = 20

Slope = -4.251 units per year.

Mann-Kendall statistic = -121 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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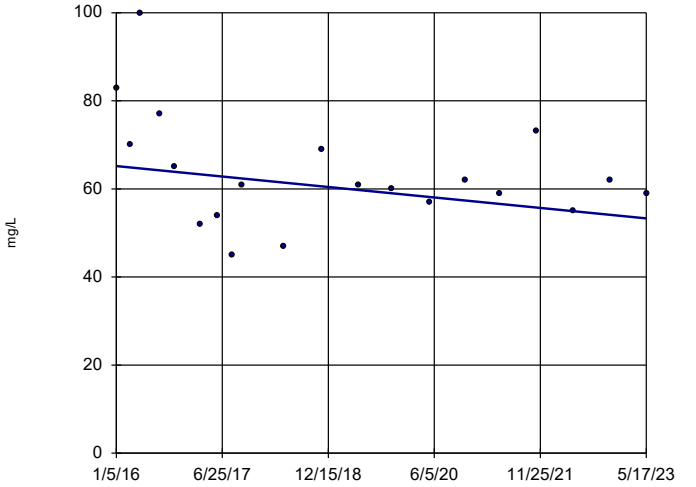
Chloride

MW-3 (bg)



n = 20

Slope = -1.609 units per year.

Mann-Kendall statistic = -43 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

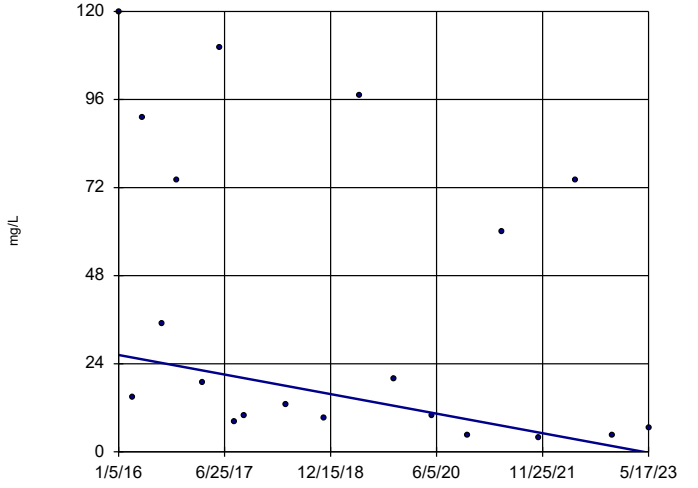
Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Chloride

MW-4



n = 20

Slope = -3.614 units per year.

Mann-Kendall statistic = -74 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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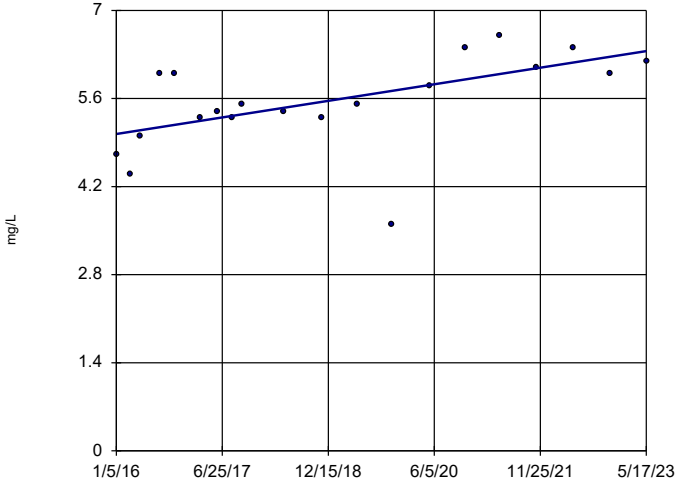
Chloride

MW-5



n = 20

Slope = 0.1787 units per year.

Mann-Kendall statistic = 93 critical = 73

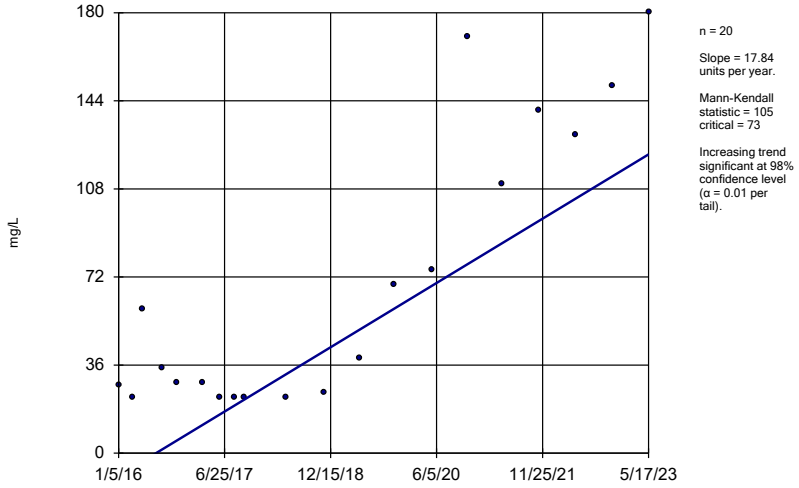
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:15 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Chloride

MW-5A



n = 20

Slope = 17.84 units per year.

Mann-Kendall statistic = 105 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

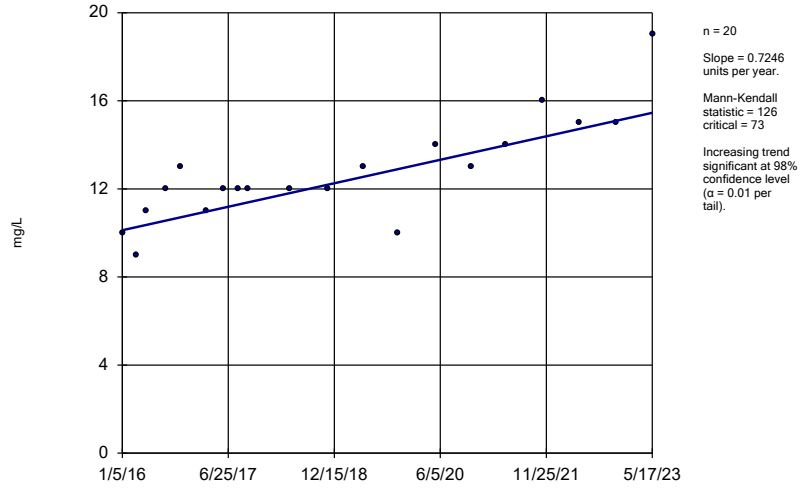
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Chloride

MW-6



n = 20

Slope = 0.7246 units per year.

Mann-Kendall statistic = 126 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

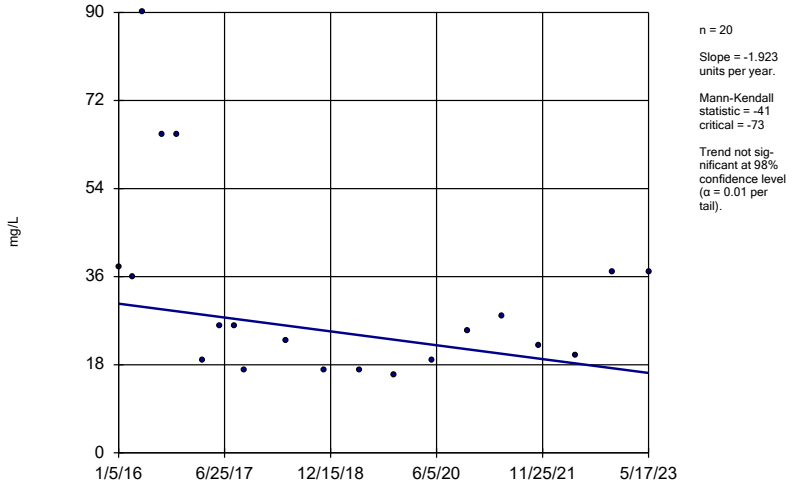
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Chloride

MW-6A



n = 20

Slope = -1.923 units per year.

Mann-Kendall statistic = -41 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

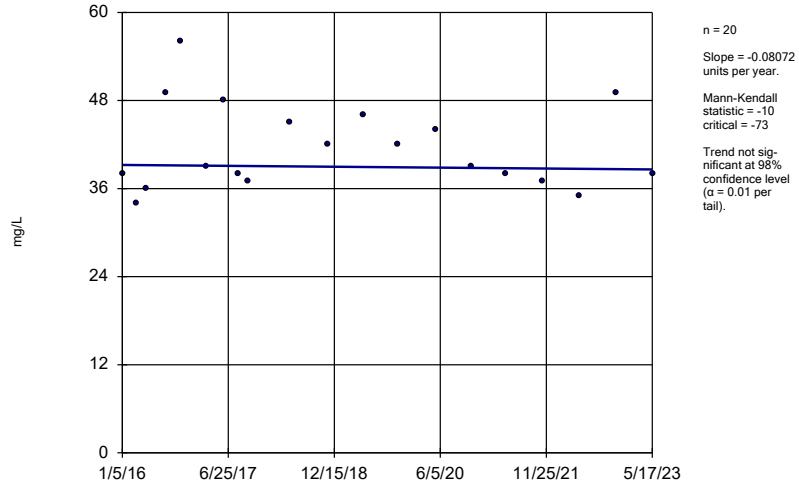
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Chloride

MW-7 (bg)



n = 20

Slope = -0.08072 units per year.

Mann-Kendall statistic = -10 critical = -73

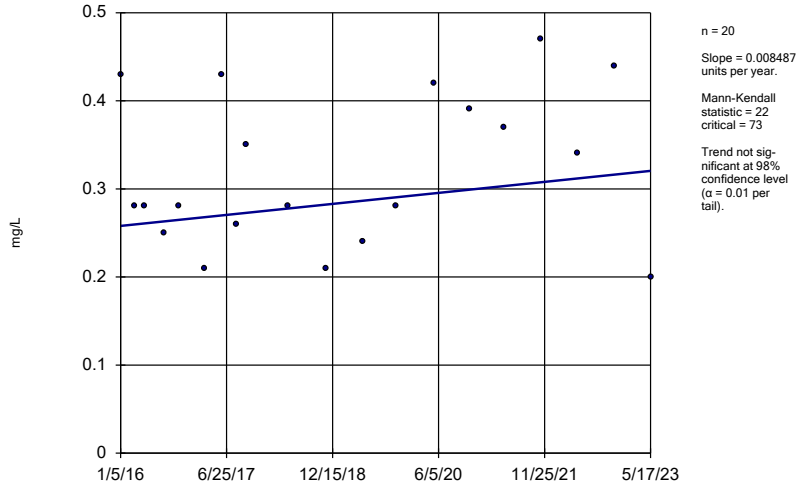
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Fluoride

MW-2 (bg)



n = 20

Slope = 0.008487 units per year.

Mann-Kendall statistic = 22 critical = 73

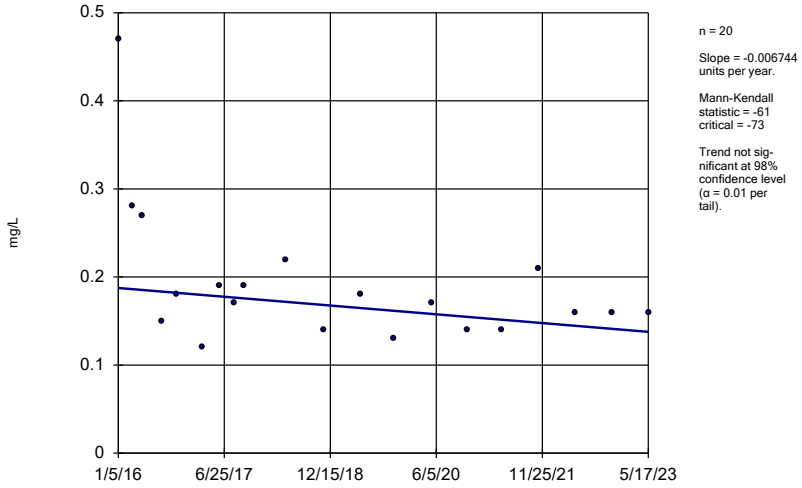
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Fluoride

MW-3 (bg)



n = 20

Slope = -0.006744 units per year.

Mann-Kendall statistic = -61 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

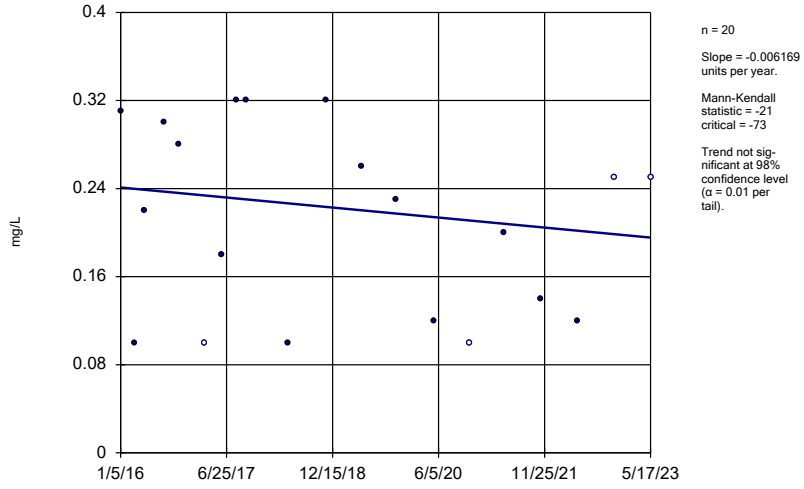
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Fluoride

MW-4



n = 20

Slope = -0.006169 units per year.

Mann-Kendall statistic = -21 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

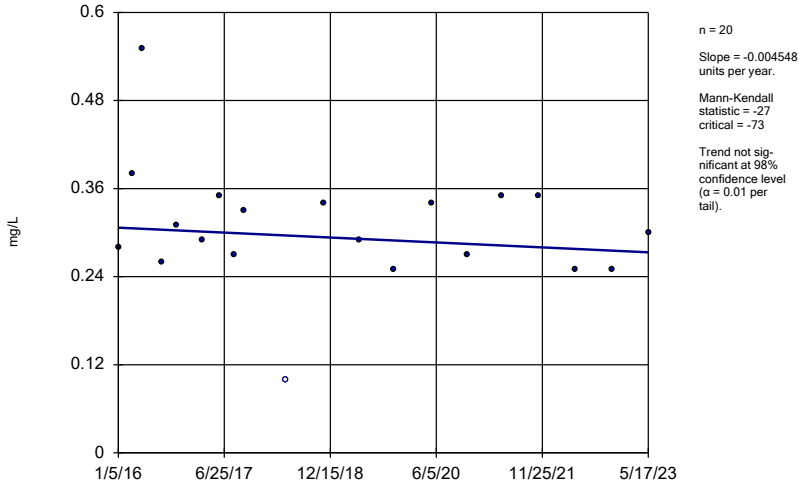
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Fluoride

MW-5



n = 20

Slope = -0.004548 units per year.

Mann-Kendall statistic = -27 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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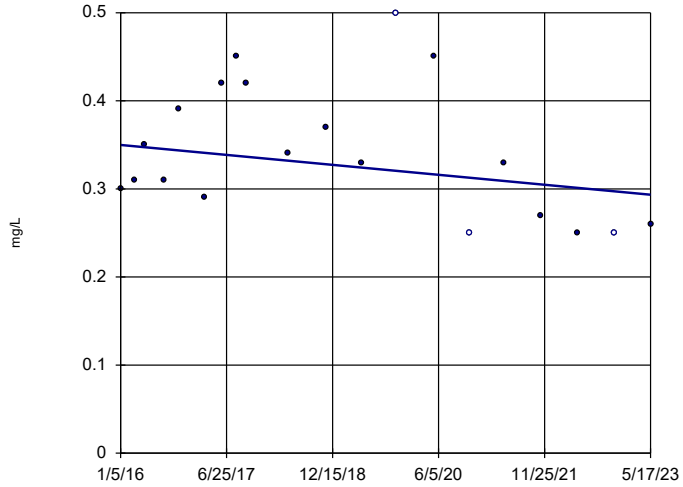
Hollow symbols indicate censored values.

Fluoride

MW-5A



n = 20

Slope = -0.007672 units per year.

Mann-Kendall statistic = -37
critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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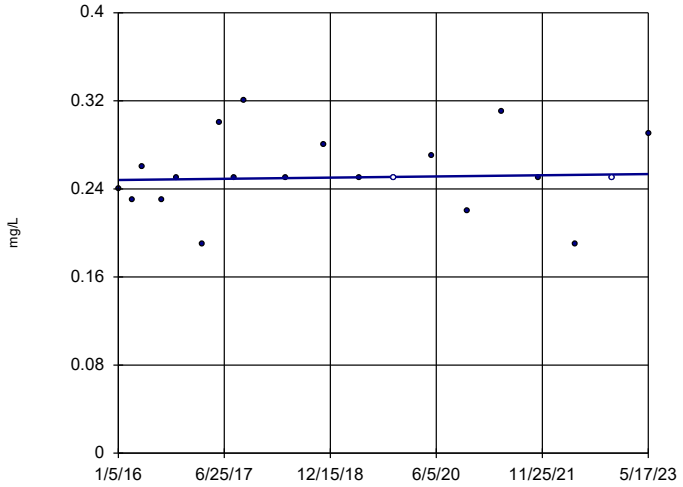
Hollow symbols indicate censored values.

Fluoride

MW-6



n = 20

Slope = 0.0007283 units per year.

Mann-Kendall statistic = 23
critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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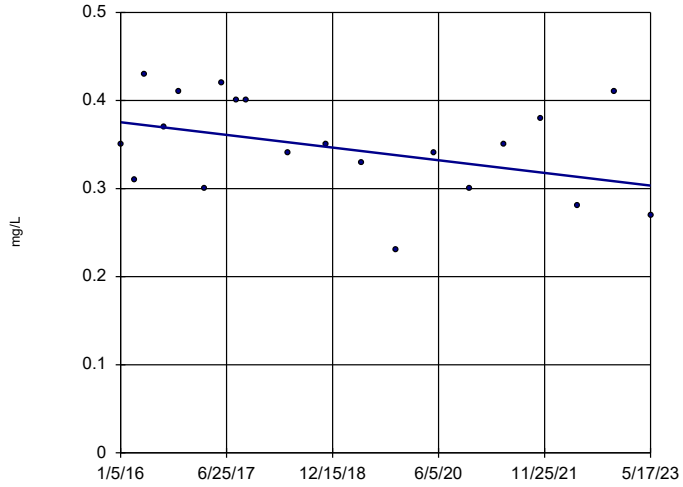
Fluoride

MW-6A



n = 20

Slope = -0.009747 units per year.

Mann-Kendall statistic = -49
critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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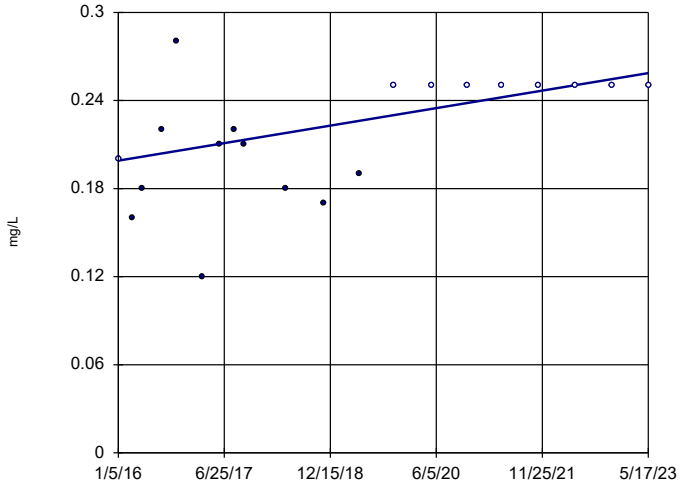
Hollow symbols indicate censored values.

Fluoride

MW-7 (bg)



n = 20

Slope = 0.008083 units per year.

Mann-Kendall statistic = 77
critical = 73

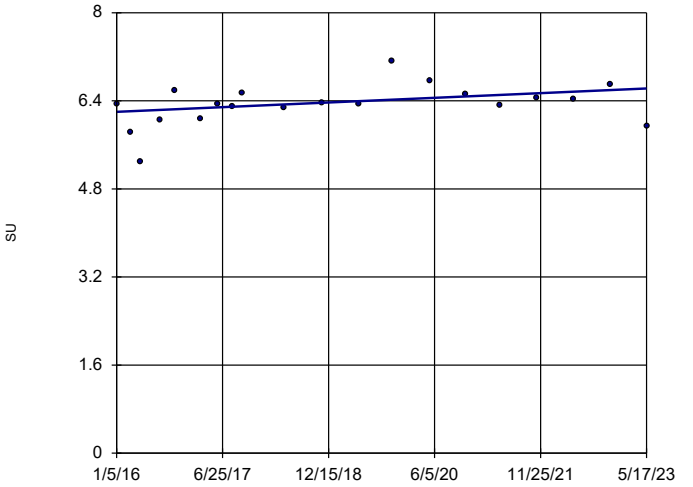
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH

MW-2 (bg)



n = 20

Slope = 0.05735 units per year.

Mann-Kendall statistic = 59 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

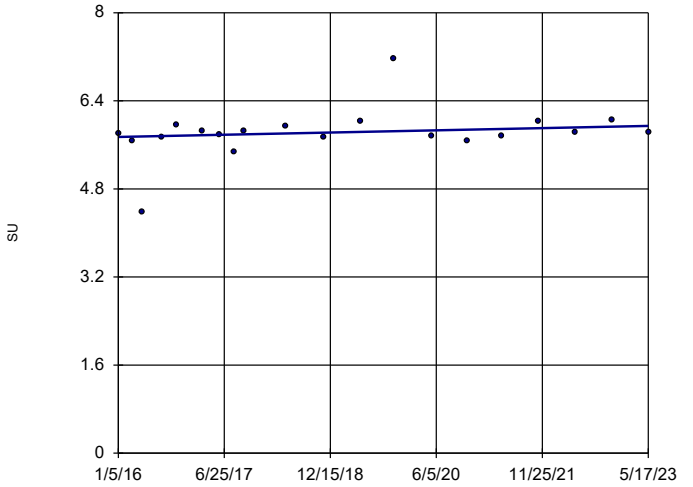
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

pH

MW-3 (bg)



n = 20

Slope = 0.02709 units per year.

Mann-Kendall statistic = 52 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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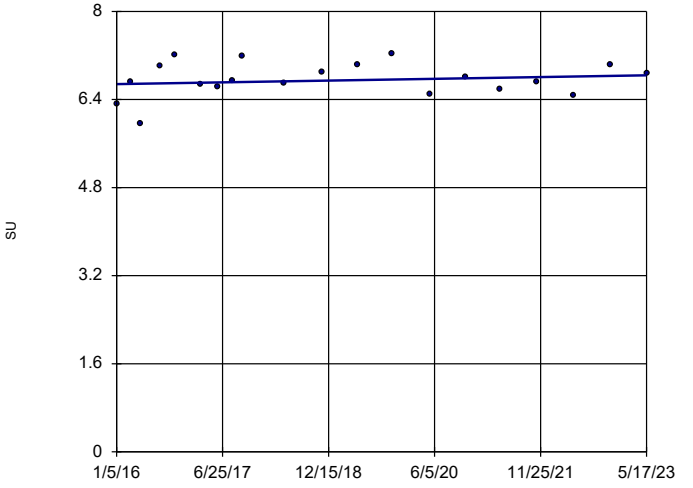
pH

MW-4



n = 20

Slope = 0.0217 units per year.

Mann-Kendall statistic = 19 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

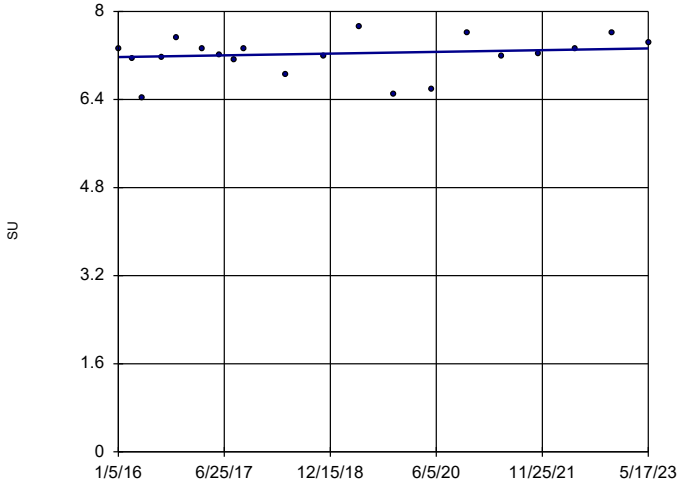
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

pH

MW-5



n = 20

Slope = 0.02125 units per year.

Mann-Kendall statistic = 34 critical = 73

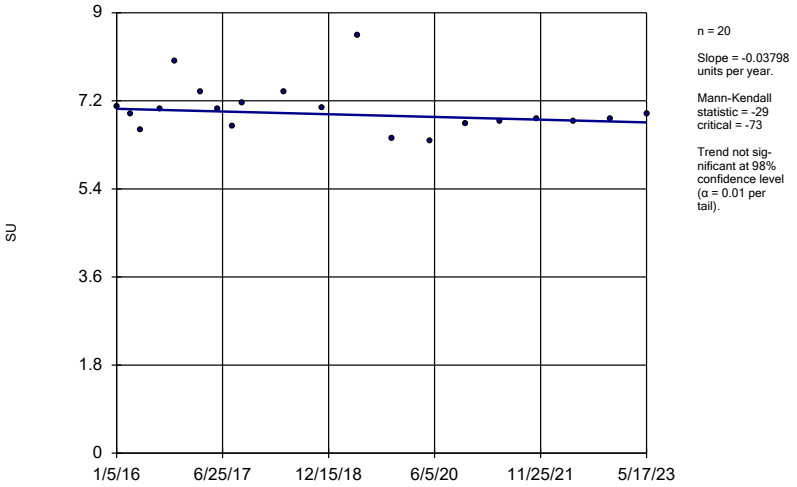
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

pH

MW-5A



n = 20

Slope = -0.03798 units per year.

Mann-Kendall statistic = -29 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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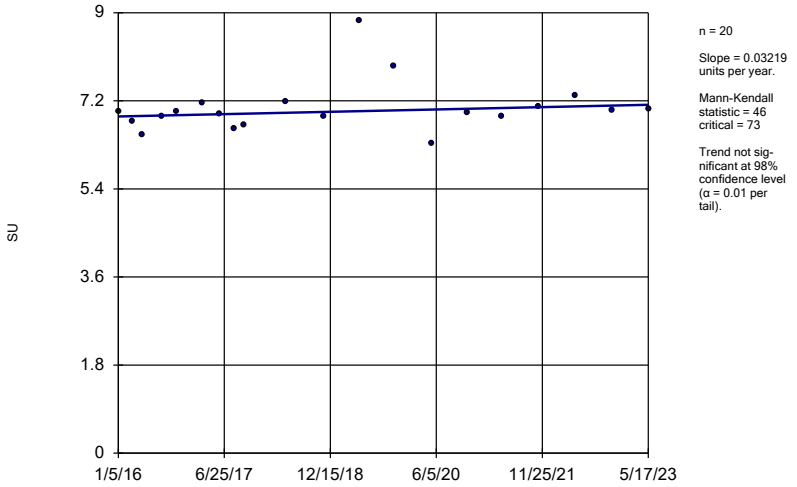
pH

MW-6



n = 20

Slope = 0.03219 units per year.

Mann-Kendall statistic = 46 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

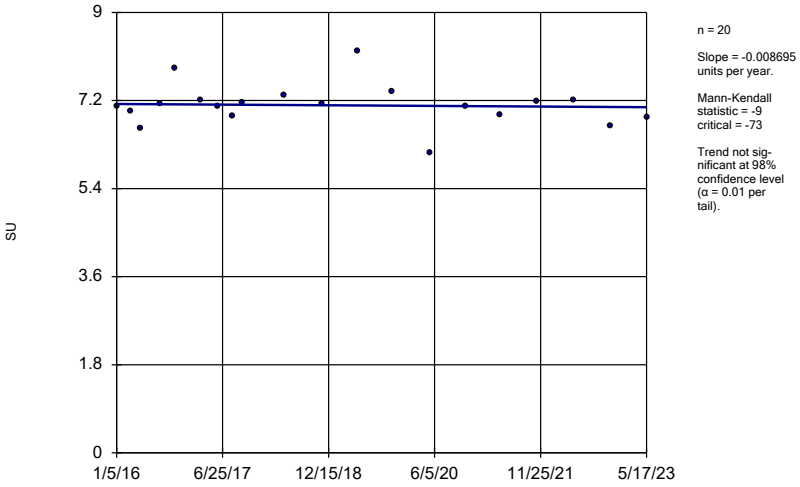
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

pH

MW-6A



n = 20

Slope = -0.008695 units per year.

Mann-Kendall statistic = -9 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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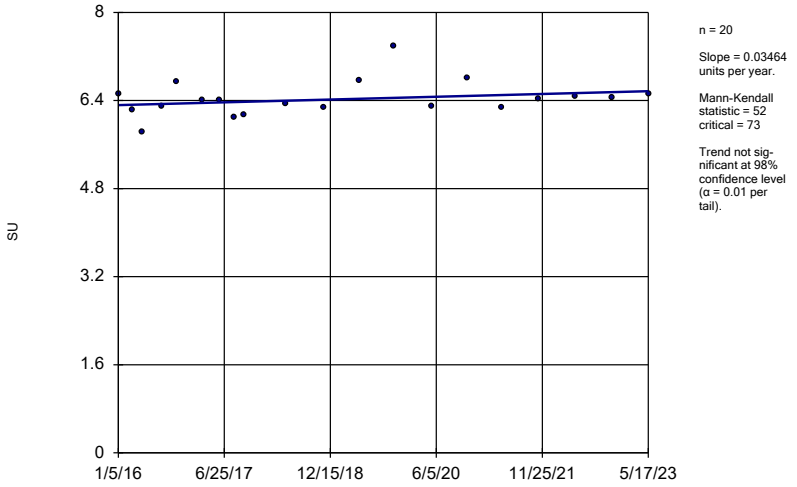
pH

MW-7 (bg)



n = 20

Slope = 0.03464 units per year.

Mann-Kendall statistic = 52 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

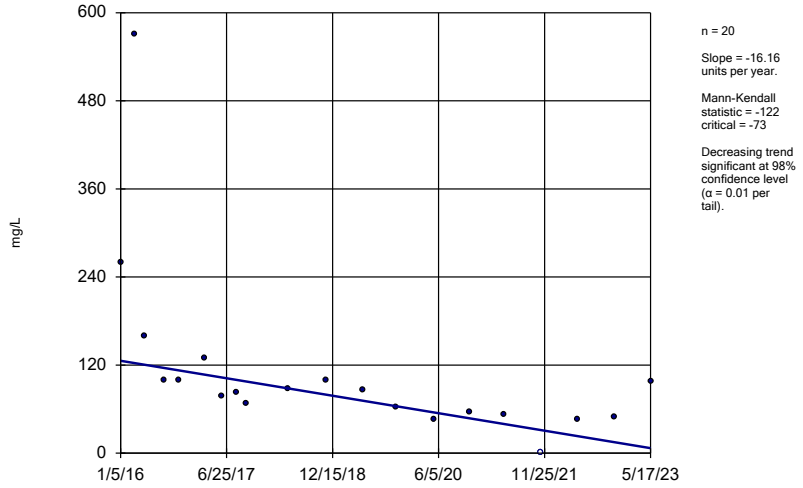
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Hollow symbols indicate censored values.

Sulfate

MW-2 (bg)



n = 20

Slope = -16.16 units per year.

Mann-Kendall statistic = -122 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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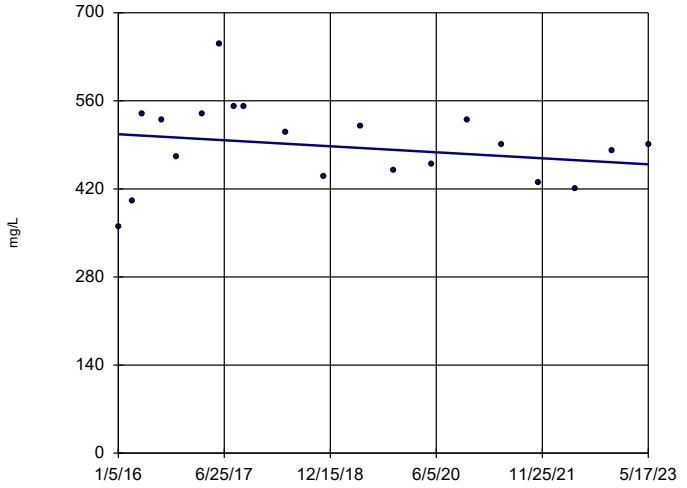
Sulfate

MW-3 (bg)



n = 20

Slope = -6.48 units per year.

Mann-Kendall statistic = -24 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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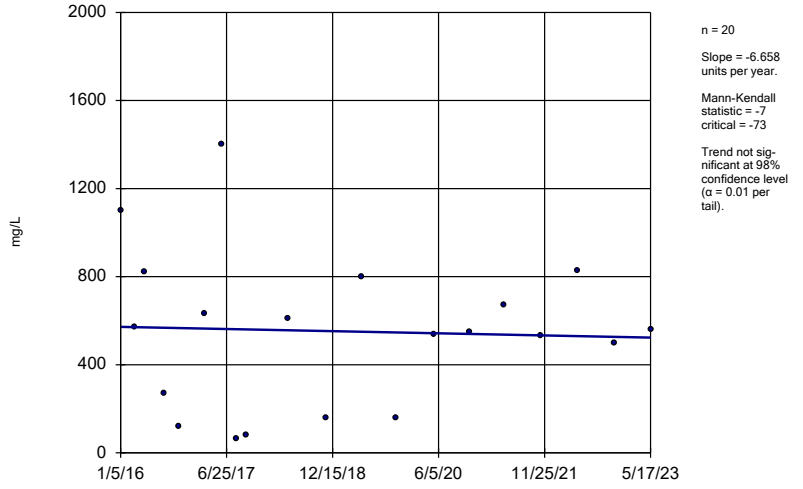
Sulfate

MW-4



n = 20

Slope = -6.658 units per year.

Mann-Kendall statistic = -7 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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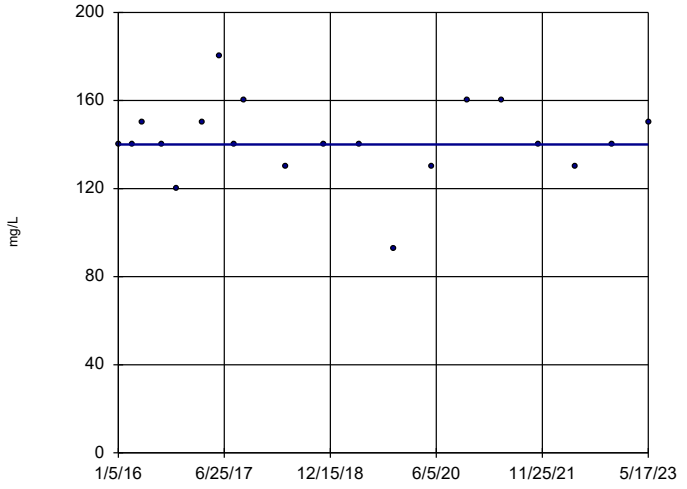
Sulfate

MW-5



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -73

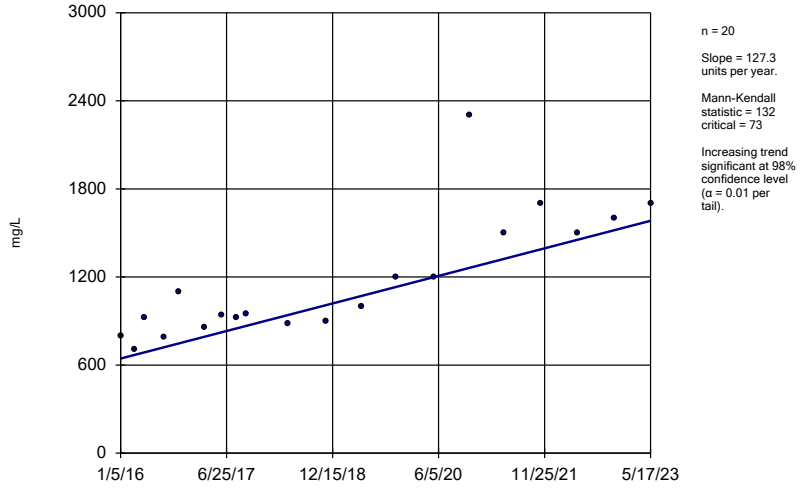
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sulfate

MW-5A



n = 20

Slope = 127.3 units per year.

Mann-Kendall statistic = 132 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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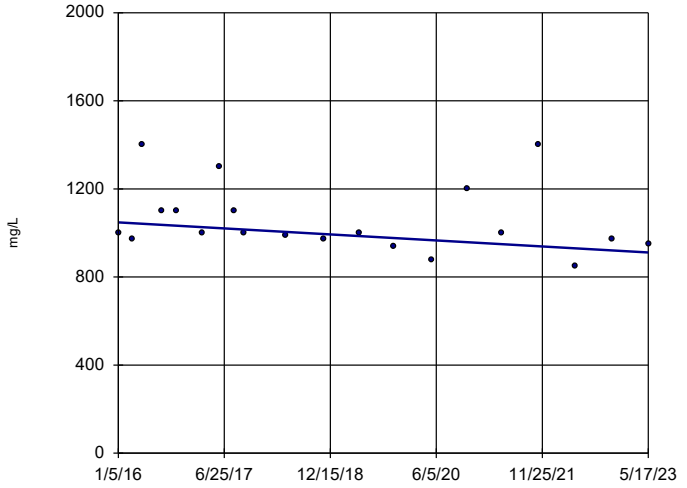
Sulfate

MW-6



n = 20

Slope = -18.61 units per year.

Mann-Kendall statistic = -57 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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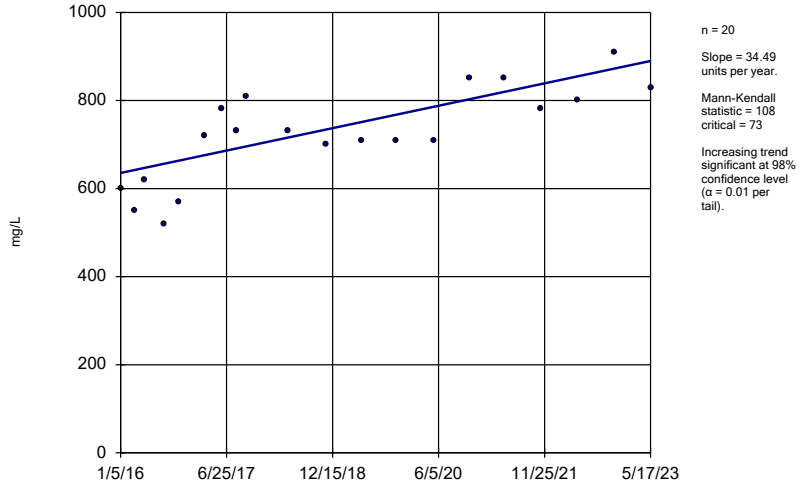
Sulfate

MW-6A



n = 20

Slope = 34.49 units per year.

Mann-Kendall statistic = 108 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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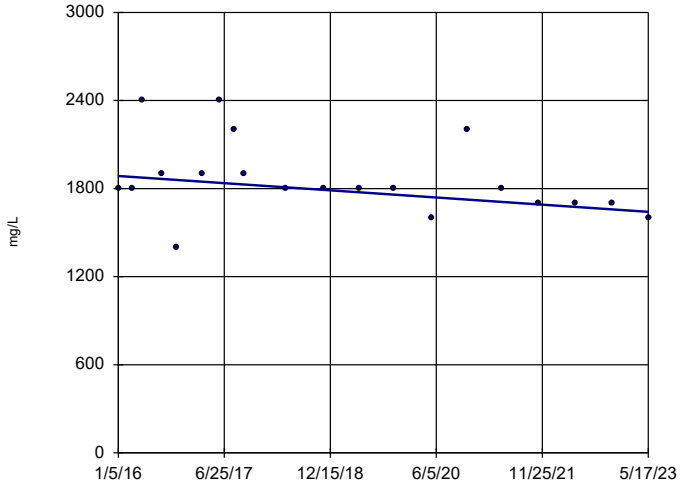
Sulfate

MW-7 (bg)



n = 20

Slope = -33.2 units per year.

Mann-Kendall statistic = -70 critical = -73

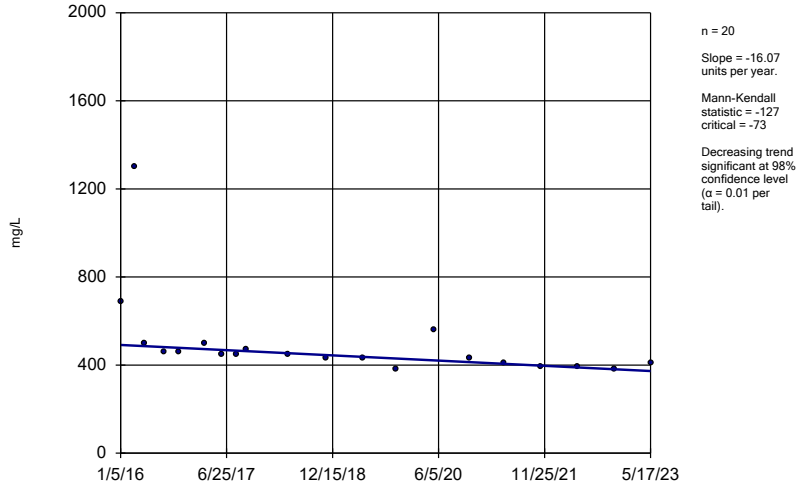
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids

MW-2 (bg)



n = 20

Slope = -16.07 units per year.

Mann-Kendall statistic = -127 critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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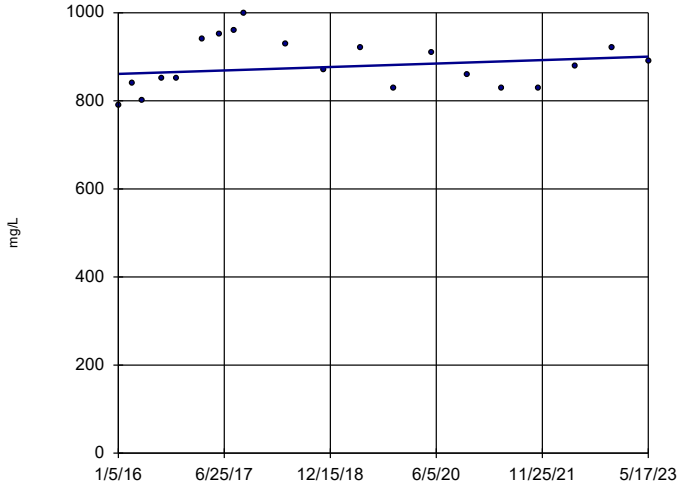
Total Dissolved Solids

MW-3 (bg)



n = 20

Slope = 5.317 units per year.

Mann-Kendall statistic = 19 critical = 73

Trend not significant at 98% confidence level (α = 0.01 per tail).

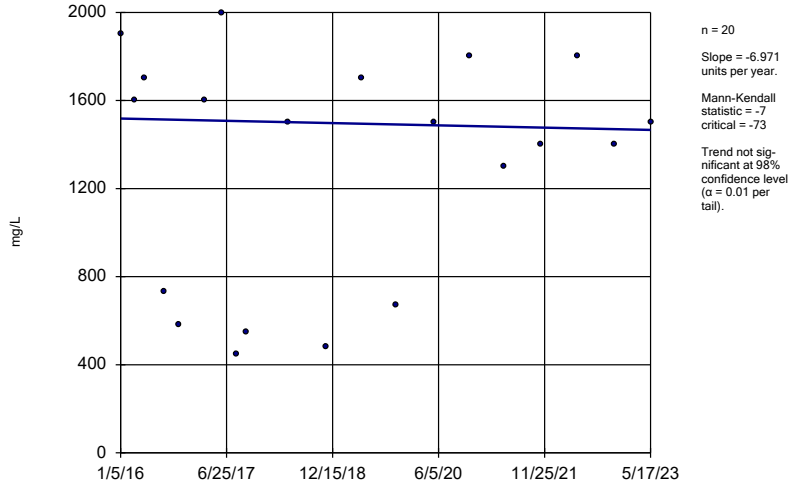
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-4



n = 20

Slope = -6.971 units per year.

Mann-Kendall statistic = -7 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

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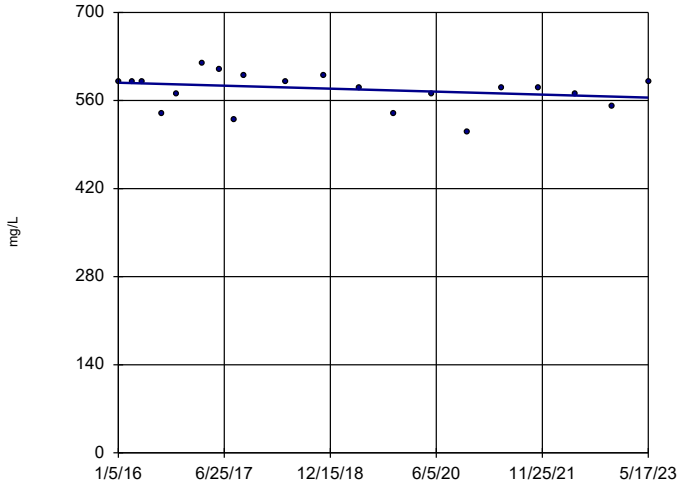
Total Dissolved Solids

MW-5



n = 20

Slope = -3.205 units per year.

Mann-Kendall statistic = -42 critical = -73

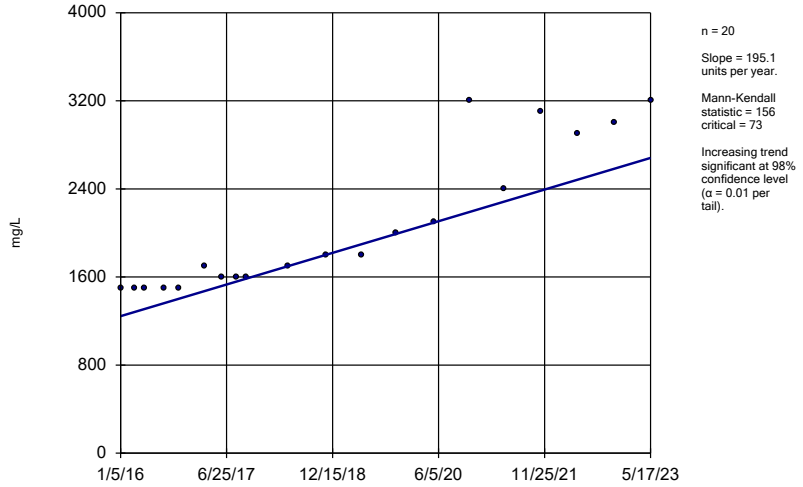
Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Total Dissolved Solids

MW-5A



n = 20

Slope = 195.1 units per year.

Mann-Kendall statistic = 156 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

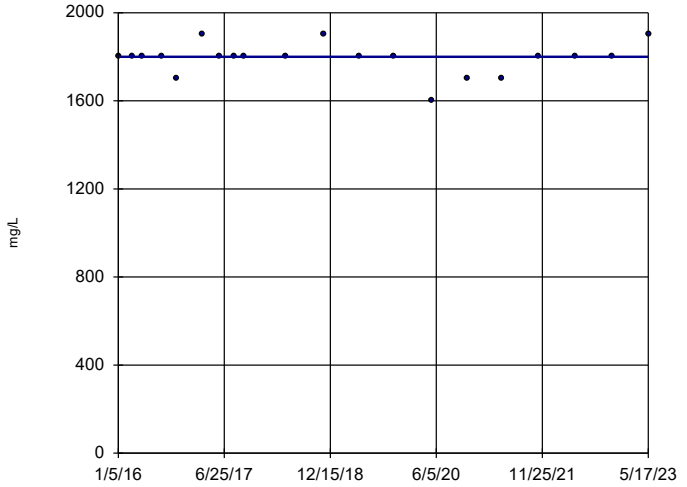
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-6



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

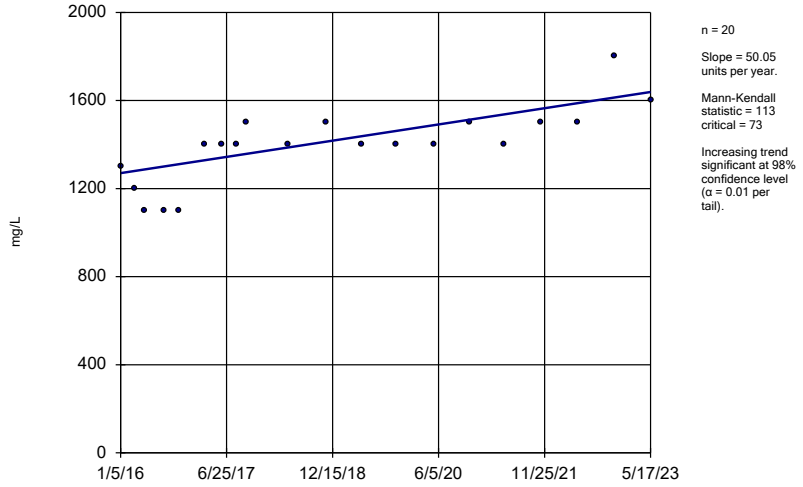
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-6A



n = 20

Slope = 50.05 units per year.

Mann-Kendall statistic = 113 critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

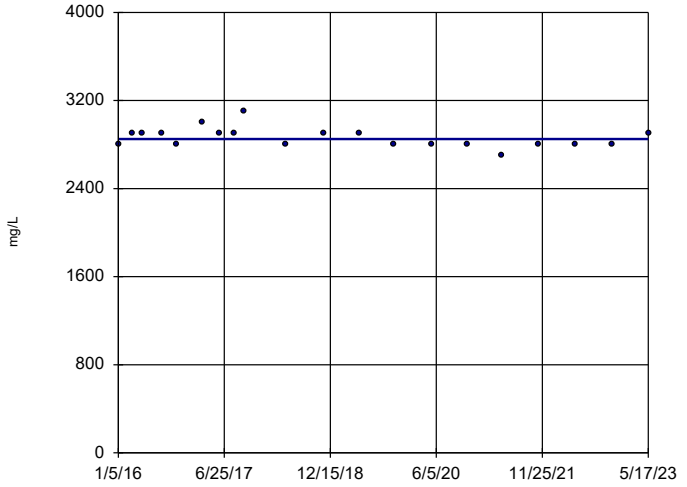
Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Sanitas™ v.10.1.03a Software licensed to Jett Environmental Consulting. UG

Total Dissolved Solids

MW-7 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -48 critical = -73

Trend not significant at 98% confidence level (α = 0.01 per tail).

Sen's Slope Estimator Analysis Run 1/7/2026 4:16 PM View: TT

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

ATTACHMENT 3

INTER-WELL PREDICTION LIMITS

Prediction Limit

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant Printed 1/7/2026, 4:37 PM

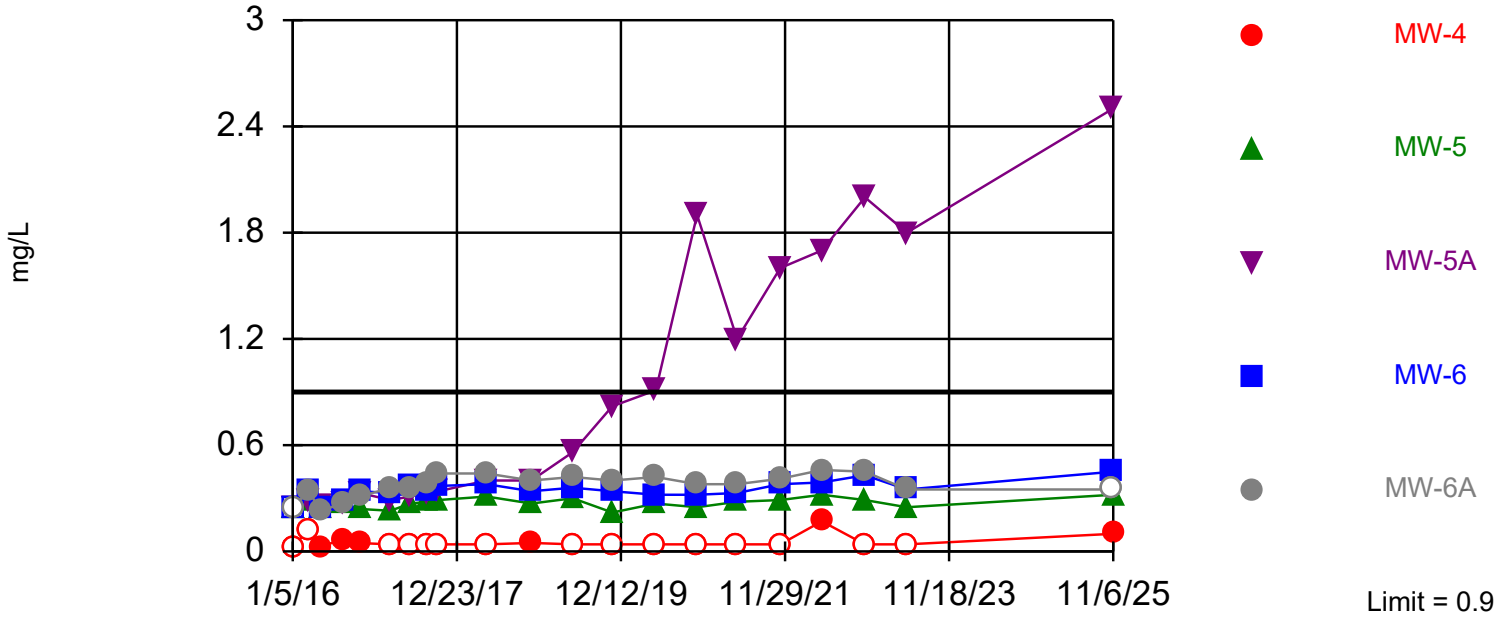
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-4	0.9	n/a	11/6/2025	0.1	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-5	0.9	n/a	11/6/2025	0.32	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	**MW-5A**	**0.9**	**n/a**	**11/5/2025**	**2.5**	**Yes**	**60**	**n/a**	**n/a**	**21.67**	**n/a**	**n/a**	**0.0005231**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	MW-6	0.9	n/a	11/5/2025	0.45	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-6A	0.9	n/a	11/5/2025	0.35ND	No	60	n/a	n/a	21.67	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-4	620	n/a	11/6/2025	85	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-5	620	n/a	11/6/2025	91	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-5A	620	n/a	11/5/2025	480	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	620	n/a	11/5/2025	290	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6A	620	n/a	11/5/2025	240	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-4	180	n/a	11/6/2025	29	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-5	180	n/a	11/6/2025	5.8	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-5A	180	n/a	11/5/2025	160	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	180	n/a	11/5/2025	34	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6A	180	n/a	11/5/2025	70	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-4	0.4397	n/a	11/6/2025	0.21	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-5	0.4397	n/a	11/6/2025	0.28	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-5A	0.4397	n/a	11/5/2025	0.27	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-6	0.4397	n/a	11/5/2025	0.25	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
Fluoride (mg/L)	MW-6A	0.4397	n/a	11/5/2025	0.17	No	60	-1.58	0.4116	15	None	ln(x)	0.001504	Param Inter 1 of 2
pH (SU)	MW-4	6.982	5.222	11/6/2025	6.61	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
pH (SU)	**MW-5**	**6.982**	**5.222**	**11/6/2025**	**7.23**	**Yes**	**60**	**241.4**	**53.74**	**0**	**None**	**x^3**	**0.000752**	**Param Inter 1 of 2**
pH (SU)	MW-5A	6.982	5.222	11/5/2025	6.61	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
pH (SU)	MW-6	6.982	5.222	11/5/2025	6.92	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
pH (SU)	MW-6A	6.982	5.222	11/5/2025	6.38	No	60	241.4	53.74	0	None	x^3	0.000752	Param Inter 1 of 2
Sulfate (mg/L)	MW-4	2400	n/a	11/6/2025	250	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-5	2400	n/a	11/6/2025	150	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-5A	2400	n/a	11/5/2025	2000	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-6	2400	n/a	11/5/2025	1100	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-6A	2400	n/a	11/5/2025	1200	No	60	n/a	n/a	1.667	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-4	3100	n/a	11/6/2025	520	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-5	3100	n/a	11/6/2025	580	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**MW-5A**	**3100**	**n/a**	**11/5/2025**	**3300**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005231**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	MW-6	3100	n/a	11/5/2025	2000	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-6A	3100	n/a	11/5/2025	2000	No	60	n/a	n/a	0	n/a	n/a	0.0005231	NP Inter (normality) 1 of 2

Hollow symbols indicate censored values.

Exceeds Limit: MW-5A

Boron

Interwell Non-parametric

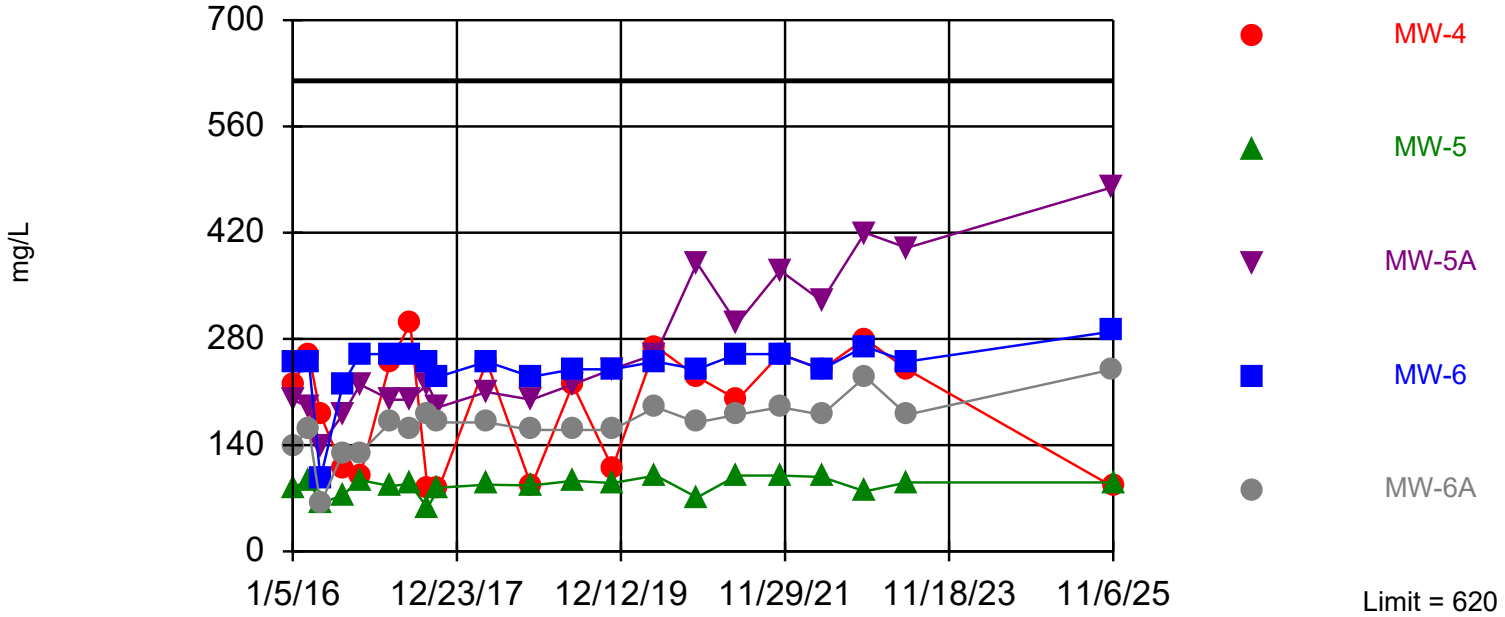


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 21.67% NDs. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

Within Limit

Calcium

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

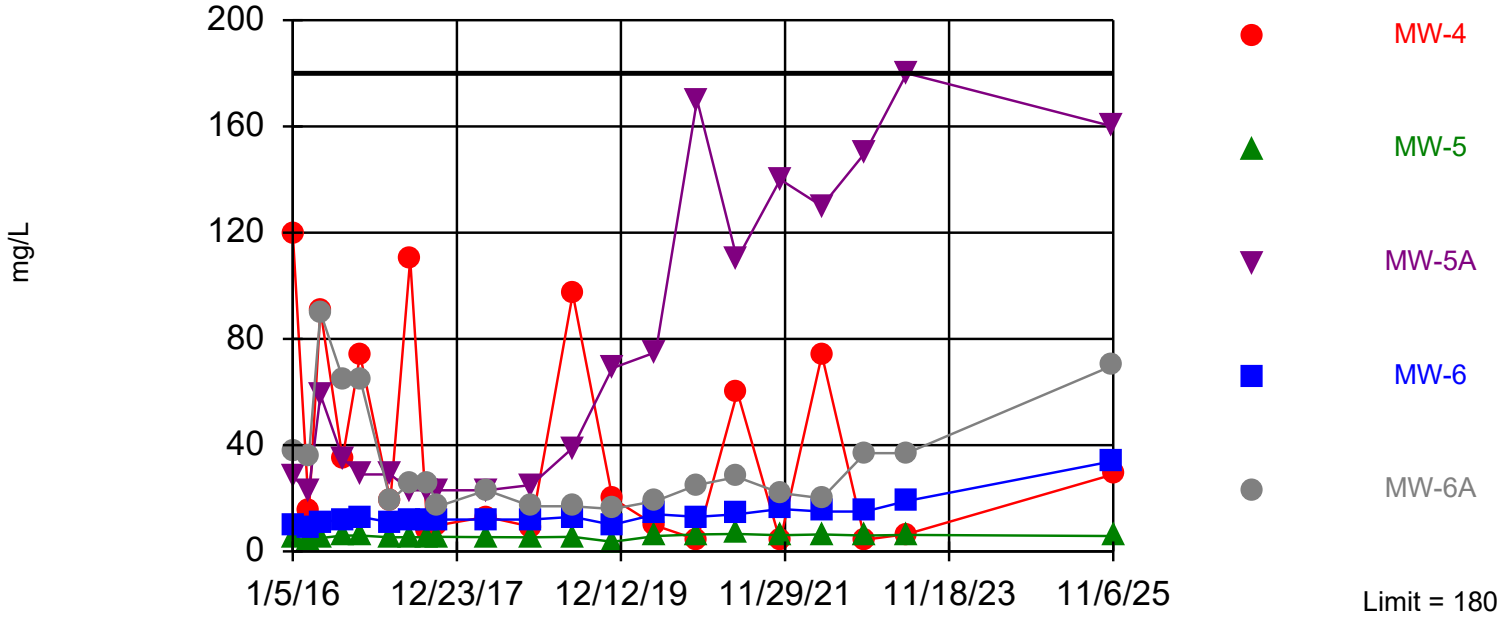
Prediction Limit Analysis Run 1/7/2026 4:27 PM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Within Limit

Chloride

Interwell Non-parametric



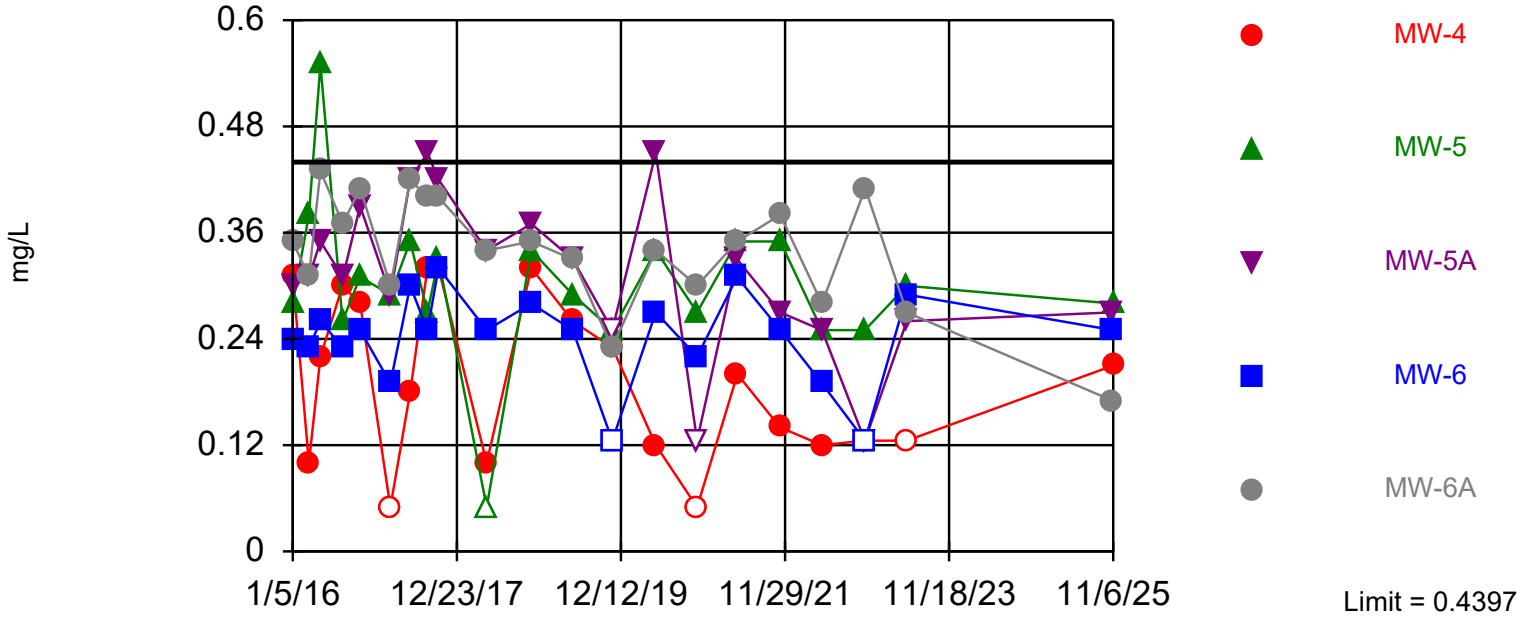
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

Hollow symbols indicate censored values.

Within Limit

Fluoride

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-1.58, Std. Dev.=0.4116, n=60, 15% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9605, critical = 0.945. Kappa = 1.842 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

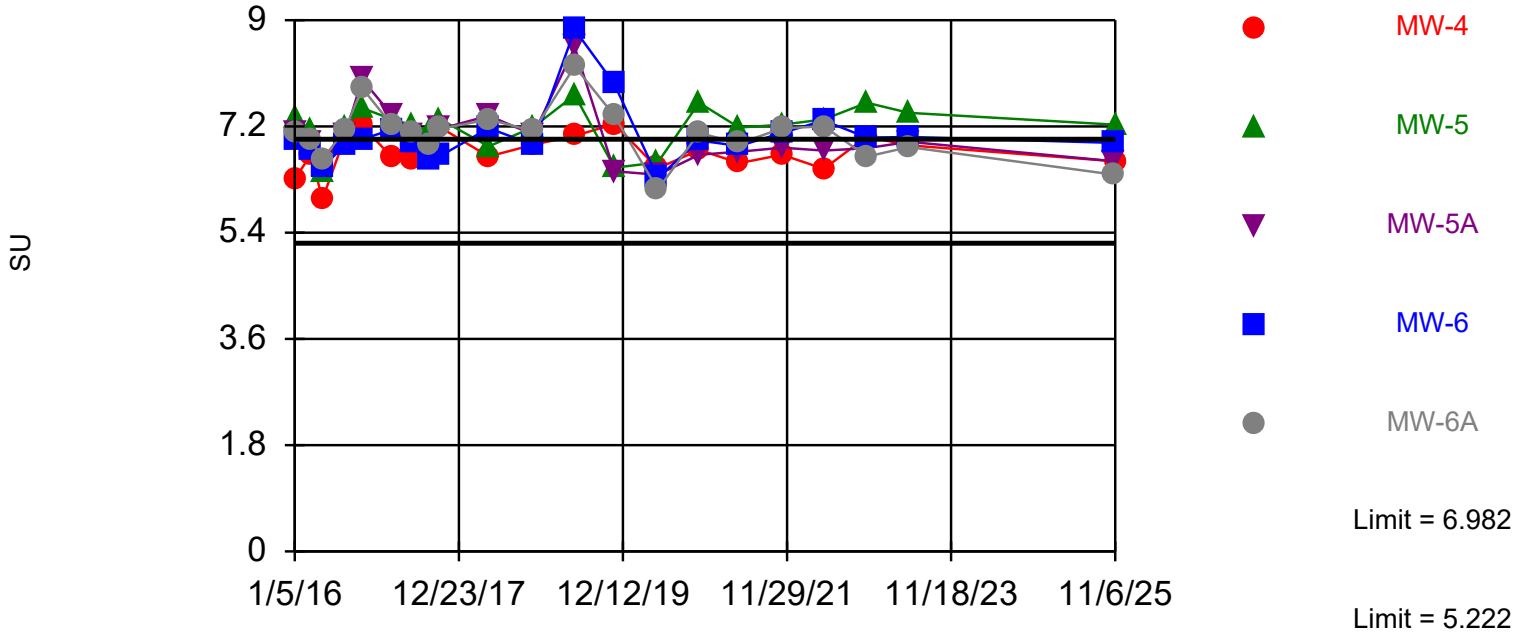
Prediction Limit Analysis Run 1/7/2026 4:34 PM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

Exceeds Limits: MW-5

pH

Interwell Parametric

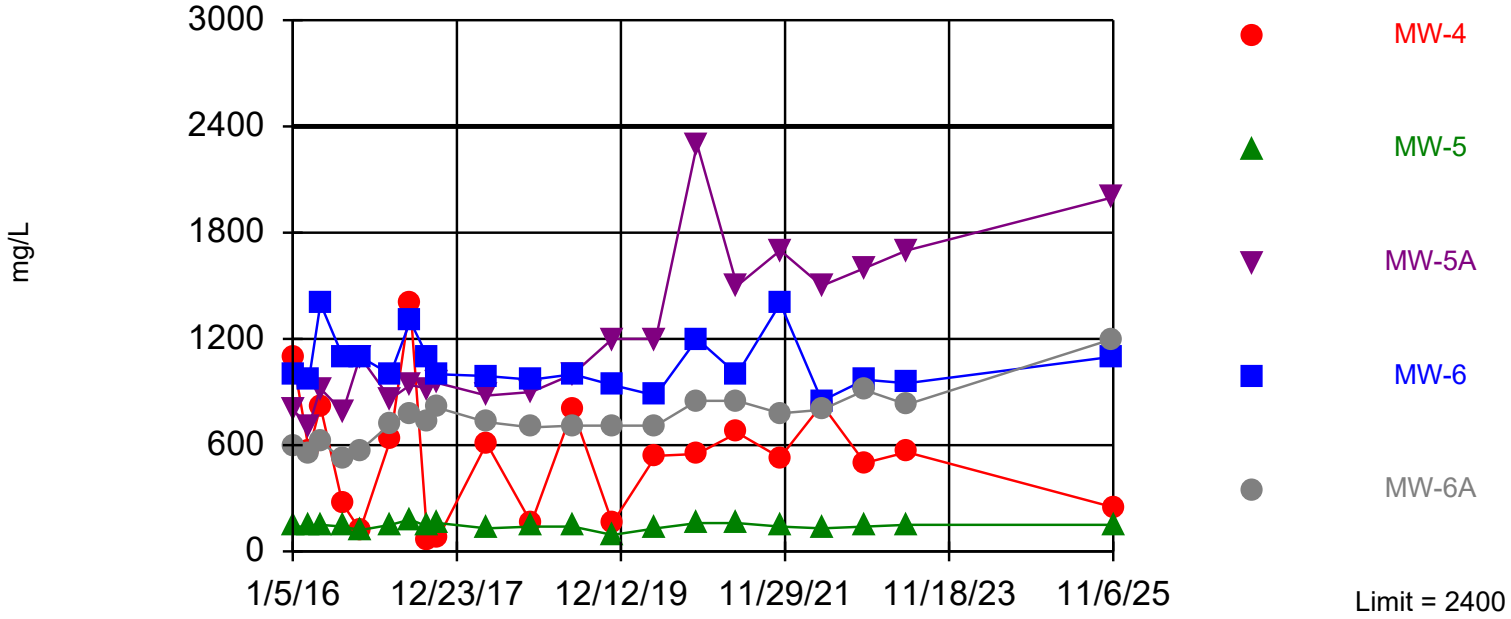


Background Data Summary (based on cube transformation): Mean=241.4, Std. Dev.=53.74, n=60. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9466, critical = 0.945. Kappa = 1.842 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000752. Comparing 5 points to limit.

Within Limit

Sulfate

Interwell Non-parametric

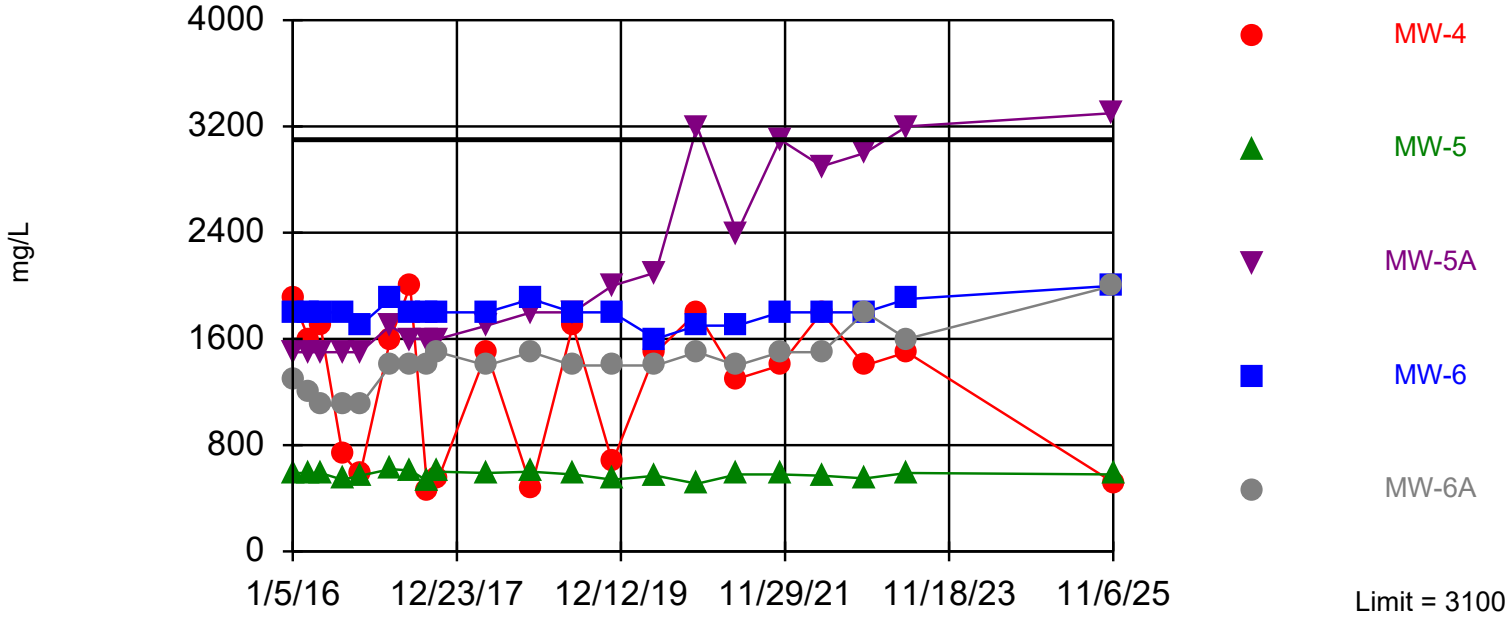


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 1.667% NDs. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

Exceeds Limit: MW-5A

Total Dissolved Solids

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.005219. Individual comparison alpha = 0.0005231 (1 of 2). Comparing 5 points to limit. Seasonality was not detected with 95% confidence.

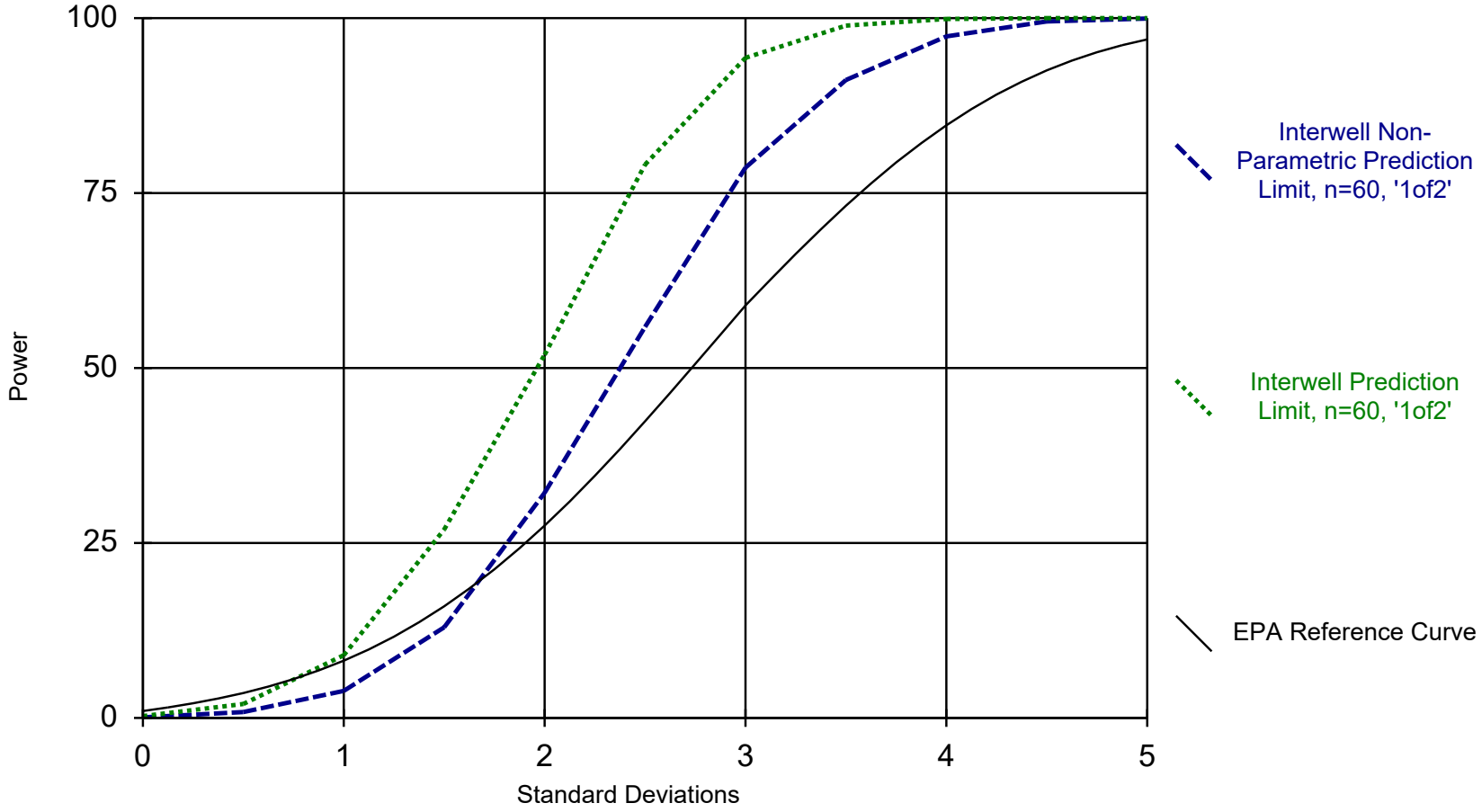
Prediction Limit Analysis Run 1/7/2026 4:36 PM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant

ATTACHMENT 4

STATISTICAL POWER CURVES

Power Curve



Analysis Run 1/7/2026 4:40 PM View: Inter-Well PLs

Asbury Power Plant CCR facility Client: The Empire District Data: Asbury Power Plant